

Exhibit 20

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
SOUTHERN DIVISION
No. 7:23-CV-00897

IN RE:

CAMP LEJEUNE WATER LITIGATION

This Document Relates to:

ALL CASES

VOLUME II

VIDEO-RECORDED EXPERT DEPOSITION OF
REMY J.-C. HENNET, PhD

Wednesday, June 4, 2025

9:19 AM Eastern Time

Reported by: Denise Dobner Vickery, CRR, RMR
Job No. MDLG7371943

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Wednesday, June 4, 2025
9:19 AM Eastern Time

Video-Recorded Expert Deposition of
REMY J.-C. HENNET, PhD, Volume II, held at the
offices of:

MOTLEY RICE LLC
401 9th Street NW
Suite 1001
Washington, DC 20004

Pursuant to notice, before Denise
Dobner Vickery, Certified Realtime Reporter,
Registered Merit Reporter, and Notary Public in
and for the District of Columbia.

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P R O C E E D I N G S

- - -

THE VIDEOGRAPHER: We are now
on the record.

My name is Deshawn White. I'm
a videographer for Golkow, a Veritext
division. Today's date is June 4, 2025
and the time is 9:19 AM.

This video is being held at
401 9th Street, Northwest, Washington, DC
in the matter of Camp Lejeune Water
Litigation versus United States of
America for the United States District
Court for the Eastern District of -- is
it North Carolina?

MS. BAUGHMAN: Yes.

THE VIDEOGRAPHER: Thank you.

The deponent is Remy
Jean-Claude Hennet.

The court reporter is Denise
Vickery.

Will counsel please identify
themselves, followed by the court
reporter administering the oath.

1 MS. BAUGHMAN: Laura Baughman
2 for the plaintiffs.

3 MS. O'LEARY: Allison O'Leary
4 for the Department of Justice.

5 MS. HORAN: Alanna Horan here
6 on behalf of the United States.

7 - - -

8 REMY J.-C. HENNET, PhD
9 recalled for examination, and, after having been
10 duly sworn, was examined and testified further as
11 follows:

12 - - -

13 FURTHER EXAMINATION

14 - - -

15 BY MS. BAUGHMAN:

16 Q. Can you please state your name for
17 the record?

18 A. My name is Remy Jean-Claude Hennet.

19 Q. Dr. Hennet, my name is Laura
20 Baughman. I'm an attorney, and I represent the
21 plaintiffs in the Camp Lejeune litigation.

22 You understand that?

23 A. Yes, I do.

24 Q. Okay. And you understand that

1 you're here today testifying under oath just as if
2 you're in court in front of the judges?

3 A. Yes, I do.

4 Q. Okay. If you don't understand any
5 question I ask you, will you please let me know?

6 A. I will.

7 Q. Otherwise, if you answer a question,
8 I'm going to assume that you understood it.

9 Is that fair?

10 A. I suppose, yes.

11 Q. Okay. Is there any reason you
12 cannot testify truthfully here today? Like are
13 you on any medications or having any -- any health
14 or other issues?

15 A. No.

16 Q. Okay. Great.

17 I want to start with your history in
18 working on Camp Lejeune-related matters.

19 So is it correct that you first
20 started working on anything related to Camp
21 Lejeune in 2005?

22 A. Approximately, yes.

23 MS. BAUGHMAN: Okay. And just
24 for context, I'm going to mark an e-mail

1 that was sent to us by one of the
2 attorneys at the Department of Justice.
3 I just have a quick question about that.
4 Okay?

5 (Document marked for
6 identification as Exhibit 30.)

7 BY MS. BAUGHMAN:

8 Q. So this is an e-mail from Joshua
9 Carpentito -- I may -- Carpenito, I guess, from
10 May 1, 2025 sent to me and other counsel
11 representing the plaintiffs, and he indicated
12 that:

13 "The United States has confirmed
14 through internal documentation that Dr. Remy
15 Hennet was retained by the Department of Justice
16 as of February 25, 2005 in Gros -- that's
17 G-r-o-s -- versus United States" and it goes on
18 from there, and that was "an action under the
19 Federal Tort Claims Act claiming personal injury
20 as a result of exposure to contaminated water at
21 Camp Lejeune."

22 MS. O'LEARY: And I'm sorry to
23 interrupt. What is the exhibit number
24 for this? It might be marked on there,

1 but I didn't hear it.

2 MS. BAUGHMAN: It's Exhibit
3 30.

4 MS. O'LEARY: 30. Thank you.

5 MS. BAUGHMAN: Okay.

6 BY MS. BAUGHMAN:

7 Q. So, Dr. Hennet, does that -- is that
8 correct? Is that consistent with your
9 recollection that you were retained on
10 February 25, 2005 in the Gros case?

11 MS. O'LEARY: Object to
12 foundation.

13 THE WITNESS: I don't recall
14 the details of it, but I was retained by
15 the DOJ in 2005. That's what I recall.

16 BY MS. BAUGHMAN:

17 Q. To work on personal injury -- a
18 personal injury case related to Camp Lejeune?

19 A. Yes. I was retained as -- as an
20 expert --

21 Q. Yes.

22 A. -- as to basically do some work on
23 the contamination in the water supply.

24 Q. Okay. Do you know how many

1 different litigation cases you've been retained on
2 by the Department of Justice related to Camp
3 Lejeune?

4 A. Yes, there were more than one, but I
5 don't know exactly.

6 Q. Okay. Other -- before we started
7 the deposition, I handed you a copy of the
8 deposition that was taken of you on March 20, 2005
9 (sic) in the Camp Lejeune Water Litigation, the
10 same litigation we're here today for.

11 You understand that?

12 A. I do.

13 Q. Okay. Other than the March 20, 2005
14 (sic) deposition, have you ever testified under
15 oath regarding Camp Lejeune before?

16 MS. O'LEARY: Object to
17 foundation.

18 THE WITNESS: I do not
19 recall. I would have to look at my CV
20 for that because all the cases that were
21 either deposition or trial testimony are
22 listed in my CV. All of them in my -- in
23 my full CV.

24 BY MS. BAUGHMAN:

1 Q. Not in the CV that was produced here
2 today; correct?

3 A. I don't know.

4 MS. BAUGHMAN: Well, let's
5 look at that then.

6 I'm marking as Exhibit 31 your
7 December 9, 2004 report that you produced
8 in this case.

9 (Document marked for
10 identification as Exhibit 31.)

11 BY MS. BAUGHMAN:

12 Q. And there is an exhibit to your
13 report that has your CV, and take a look at that
14 and let me know if you've ever testified before
15 regarding Camp Lejeune other than on March 20,
16 2025.

17 A. I have to find it in this document.

18 Q. Yeah.

19 A. (Reviews document.)

20 Q. It's Attachment A. There you go.

21 A. I just found it. Okay.

22 Q. So fifth page of the Attachment A
23 provides deposition experience, but it's only 2020
24 to present, and my question is not limited to

1 that.

2 I'm asking: Have you ever testified
3 regarding Camp Lejeune?

4 A. Again, you know, my full CV, I
5 guess, is accessible on the webpage of my company,
6 and here for this report I was -- I was asked or
7 directed to basically provide information as far
8 as my testimonies were concerned for the last four
9 or five years. That's what I -- that's what I
10 recall.

11 Q. Okay. So based on your memory,
12 you're saying you don't know whether you've ever
13 testified under oath before March 20, 2025
14 regarding Camp Lejeune; is that correct? You
15 don't remember?

16 A. Well, I know I did some reports. I
17 did some declarations and I, you know, it has been
18 20 years span that we are talking about. And my
19 memory, I do not have an answer for you that will
20 be detailed, no.

21 Q. But if I go online on your company's
22 website, that lists -- that provides the full list
23 of your prior testimony and that will give me the
24 answer.

1 Is that what you're saying?

2 A. That's what I am saying.

3 Q. Okay. Thank you.

4 Has all of your work related to Camp
5 Lejeune been on behalf of the Department of
6 Justice?

7 A. Yes.

8 Q. And has all of your work related to
9 Camp Lejeune been related to litigation matters?

10 A. I believe so, but I am -- it could
11 have been that I may have been asked to do some
12 consulting at some point. I -- but, by and large,
13 it was always related to some type of litigation.

14 Q. Wait. Who asked you to do
15 non-litigation consulting related to Camp Lejeune?

16 MS. O'LEARY: Object to
17 foundation.

18 THE WITNESS: I don't know if
19 I ever did that and I don't know. I
20 wouldn't know who ask me to do anything
21 like this. But we're talking about 20
22 years and, you know, I am a consultant.
23 So sometimes I am asked questions about
24 being retained as an expert.

1 BY MS. BAUGHMAN:

2 Q. Okay. As your -- based on your best
3 recollection today, can you identify any
4 non-litigation work you've ever done related to
5 Camp Lejeune?

6 A. Right here I cannot identify any --

7 Q. Okay.

8 A. -- at this today.

9 MS. BAUGHMAN: I'm going to
10 hand you what I've marked as Exhibit 32
11 to your deposition.

12 (Document marked for
13 identification as Exhibit 32.)

14 BY MS. BAUGHMAN:

15 Q. Here you go.

16 A. Thank you.

17 Q. And Exhibit 32 is Bates-stamped
18 CLJA_UST02-0000522322 through 323. It's an e-mail
19 chain.

20 I'm going to direct your attention
21 to the e-mail in the first page at the bottom half
22 of the page from you to Adam Bain, subject
23 "Building 902."

24 Do you see that?

1 A. Yes, I do.

2 Q. Okay. And this e-mail you're
3 writing to Mr. Bain and you're recommending -- you
4 see in that second paragraph -- "that 4 boreholes
5 be constructed to establish the groundwater flow
6 direction in the area of building 902."

7 Do you see that?

8 MS. O'LEARY: Object to form
9 and foundation.

10 THE WITNESS: I see that.

11 BY MS. BAUGHMAN:

12 Q. Okay. And in the fourth paragraph
13 of that e-mail you say:

14 "In the new borings, groundwater
15 samples should be collected at the water table and
16 deeper at 20-feet depth increments and analyzed
17 for TCE and PCE."

18 Do you say that? You see that?

19 A. I see that.

20 Q. And then in the next paragraph you
21 say:

22 "Soil samples should be collected in
23 one borehole at depths of about 20, 40, and 80
24 feet and analyzed for their fraction organic

1 carbon."

2 You see that?

3 A. I see that.

4 MS. O'LEARY: Object to
5 foundation.

6 BY MS. BAUGHMAN:

7 Q. Okay. Why were you making these
8 recommendations regarding boreholes, groundwater
9 samples, and soil samples in September of 2006?

10 A. Well, I -- my recollection is at the
11 time I was trying to understand where the
12 contamination was coming from to some water supply
13 ways that were contaminated. That's -- that's a
14 reason why I was doing this. That was part of the
15 first phase of things that I did after having been
16 retained by the DOJ.

17 Q. So this -- so this was -- the
18 request for the drilling of the boreholes and the
19 groundwater samples and the soil samples was done
20 in connection with litigation that the DOJ hired
21 you to work on; is that correct?

22 A. Well, my recollection is, is that I
23 was just trying to understand the sources.

24 Q. For what purpose?

1 A. For the purpose of why was it
2 contamination in the water supply.

3 Q. But why?

4 A. In certain -- in certain specific
5 wells, and if I recall for this, that was I think
6 the wells were 60 -- 600 series of wells that are
7 along there.

8 Q. In the Hadnot Point area?

9 A. In the Hadnot Point area.

10 Q. Okay. But I guess you were hired to
11 do this work by someone; right? I mean, you
12 weren't doing it for your own edification?

13 A. I think that was part of what I was
14 hired for in -- in -- for the Camp Lejeune issue.
15 I think at the beginning, there was some unknown
16 as far as certain wells had contamination, and in
17 order to understand that, I wanted to understand
18 where it come from.

19 Q. So --

20 A. Where it came from. Sorry.

21 Q. Right.

22 So you're e-mailing Mr. Bain.

23 You're clearly doing this work for
24 the Department of Justice; correct?

1 A. Yeah, yeah, yeah. Yes.

2 Q. Okay. For the litigation?

3 A. That's my understanding, yeah.

4 Q. Well, for example, did you do any
5 work to help remediate the Camp Lejeune site?

6 A. No, I did not do remediation work.

7 Q. Okay.

8 A. But the information that I
9 recommended be acquired, I suppose, was relevant
10 to what I did, but it might have been relevant to
11 what other people did who might have been
12 basically involved in the remediation work.

13 Q. But that wasn't your purpose in
14 doing this?

15 A. No.

16 MS. BAUGHMAN: Okay. So I'm
17 handing you what's marked as Exhibit 33
18 to your deposition.

19 (Document marked for
20 identification as Exhibit 33.)

21 BY MS. BAUGHMAN:

22 Q. And Exhibit 33 is Bates-stamped
23 CLJA_UST02-0000523534, and this is just a
24 one-paragraph e-mail from Scott Williams to Robert

1 Lowder on June 8, 2007, and it says "Bob" -- this
2 is from Scott.

3 "Bob, I just spoke with Remy Hennet.
4 He formed me that he has the data he needs."

5 And if you go down toward the bottom
6 of the e-mail, the second to last line it says:

7 "As far as Remy is concerned it is
8 the CERCLA teams call. He has what he needs."

9 Do you know what -- what you needed
10 at that time? Do you remember this?

11 A. Vaguely, but if I recollect what I
12 needed was understanding the direction of
13 groundwater flow around well 600 series, and --
14 and I also wanted to have basically measurements
15 of the fraction organic carbon in the groundwater
16 environment. And that's what I recall that's what
17 I needed.

18 Q. Okay. Do you remember, did you ever
19 request any other testing be done at Camp Lejeune
20 other than the e-mails I've just shown you?

21 A. No. The exception would be recently
22 I had -- before my expert report, I had asked via
23 counsel for the -- the water treatment personnel
24 to measure something in there related to a

1 spiractor --

2 Q. Okay.

3 A. -- effluent pipe.

4 Q. Yes. We're definitely going to talk
5 about that.

6 So other than the requests that are
7 documented in Exhibits 32 and 33 that we just
8 talked about and your request for a measurement of
9 the spiractor pipe at the water treatment plant,
10 have you ever requested any other testing be done
11 at Camp Lejeune?

12 A. I don't recollect any.

13 Q. Okay. So in your last deposition,
14 you testified that you had been to Camp Lejeune
15 three times.

16 Is that consistent -- no, that's not
17 right.

18 Three times in this case; is that
19 correct?

20 A. That's what I recall, yes.

21 Q. Okay. Do you know how many other
22 times you've been to Camp Lejeune other than for
23 the purpose of this case?

24 A. I do not recall exactly, but there

1 were instances where I went to do site visit at
2 Camp Lejeune, yes, and probably early on as that's
3 what I recall.

4 Q. Okay. Each time you went, that
5 would have been for purposes of litigation matters
6 for the DOJ; right?

7 A. Yes.

8 MS. BAUGHMAN: Okay. Okay.
9 I'm handing you what we've marked as
10 Exhibit 34 to your deposition.

11 (Document marked for
12 identification as Exhibit 34.)

13 MS. BAUGHMAN: And this is the
14 Supplemental and Corrected Reliance List
15 that was provided to us by DOJ in
16 February of 2025.

17 Let me also -- I already --
18 what's the exhibit number for the report?
19 Can you remind me? Is that 30?

20 THE WITNESS: For the report?
21 Excuse me.

22 MS. O'LEARY: 31.

23 THE WITNESS: 31, right.

24 MS. BAUGHMAN: Thank you.

1 BY MS. BAUGHMAN:

2 Q. All right. Does the Supplemental
3 and Corrected Reliance List list all of the
4 documents that you reviewed and you're relying on
5 for your opinions in this case?

6 A. Well, I have access to the full set
7 of documents via, you know, a portal, I guess, but
8 those are the ones that, I suppose.

9 Q. Okay. What do you mean by the full
10 set of documents in the portal? What are you
11 referring to there?

12 A. Well, I am referring to, I guess,
13 those -- those documents which the ones cited in
14 my report, and I had access to the -- to all the
15 documents and that's what I recall. Specific
16 documents, I don't by memory remember exactly what
17 those documents would have been without seeing
18 them, you know.

19 Q. All right. So you understand that
20 the federal rules require you to provide a list
21 with your report of the documents that you've
22 reviewed and that you're relying on for your
23 opinions in this case, and counsel has provided us
24 with this Supplemental and Corrected Reliance

1 List.

2 And I'm trying to figure out if
3 there are any other documents that you plan to
4 rely upon for your opinions in this case that are
5 not listed on Exhibit 34.

6 Are you aware of any?

7 A. I am not aware of any that would be
8 specific to -- to Camp Lejeune. You know, I have
9 books that I use, and if a question comes, I may
10 just, you know, that's basically based on all my
11 knowledge, experience, education.

12 Q. Okay. As you sit here today, can
13 you identify any document, book, anything that you
14 are relying on for your opinions in this case --

15 A. No.

16 Q. -- that's not listed in Exhibit 34?

17 A. Not to my knowledge.

18 Q. Okay. So you've provided two errata
19 sheets, like corrections, to your report as part
20 of this litigation. Most of it was like
21 corrections to citations to documents.

22 Other than what was contained on
23 those errata sheets, have you identified any other
24 changes that you wish to make to your expert

1 report, Exhibit 31?

2 A. No, I have not. It may be some
3 spelling mistakes or "I" for "they," you know,
4 because of my French accent sometimes when I say
5 "they."

6 Q. Okay. Let's talk about substantive,
7 substantive changes, not -- not grammatical or
8 spelling issues.

9 Can you identify any substantive
10 change that you would like to make to your report,
11 Exhibit 31?

12 A. I have no substantive changes to be
13 made.

14 Q. Okay.

15 A. With the exception of, you can have
16 some confusion between an "I" and a "they" as far
17 as the meaning of the sentence. Right?

18 Q. Okay. I want to go back to ask you
19 a few questions about your CV.

20 So that again Exhibit --

21 A. 31.

22 Q. -- 31 is your report and your CV is
23 attached as Attachment A.

24 And, actually, I was going to ask

1 you if exhibit -- the CV that's attached as
2 Attachment A to your report is a true and correct
3 copy of your current CV, but it's not; right?

4 Your current CV is actually what's
5 on your website; is that fair?

6 A. Well, this is with the last four
7 years of testimony or trial appearances; whereas,
8 my CVs that you can find on our website may have
9 something, everything I ever done as a
10 professional for deposition or trial appearances
11 and, you know, it doesn't stop at 2020 in that
12 case.

13 Q. Okay. With the exception of the
14 list of your prior testimony, is this the CV
15 attached as Attachment A to your report a true and
16 correct copy of your current CV?

17 A. I believe so.

18 Q. Okay. On the first page in the
19 first paragraph at the top, there is a sentence
20 that says:

21 "Dr. Hennet is often retained as an
22 expert witness for litigation in providing
23 services to industry, law firms, and the U.S.
24 Department of Justice."

1 Do you see that?

2 A. I do.

3 Q. Okay. And that's true; right?

4 A. That is true.

5 Q. Can you tell me, like, over the past
6 year, let's say, what percentage of time you
7 worked on litigation matters as opposed to other
8 work?

9 A. Well, roughly, over the past year
10 especially I have done more litigation-related
11 work than I did over my career. Right?

12 Q. Okay. So I'm going to break it down
13 in different time frames. I'll first just ask for
14 the last year and then we'll go backwards. Okay?

15 So over the last year, can you
16 estimate is your work 50 percent litigation or --
17 or more or less? What can you tell me?

18 A. Well, 50 percent is a good guess.

19 Q. Okay.

20 A. Right.

21 Q. And then let's say last five years.

22 Over the last five years, what
23 percentage of your time would be litigation
24 related?

1 A. It would be a little bit less than
2 presently.

3 Q. So maybe 40 percent? 30 percent?

4 A. That's a good guess as well.

5 Q. Okay. Have you ever been retained
6 by a plaintiff or a group of plaintiffs who were
7 injured or claimed they had been injured from
8 exposure to toxic substances to be an expert in
9 that kind of a case?

10 A. That could have been. You know, I
11 have done work for all kind of -- all kind of
12 parties, if you wish, that included, you know,
13 Sierra Club. For example, I have worked for the
14 Sierra Club. River Keepers I guess I did some
15 work for this type of group. I have done industry
16 work.

17 And as far as having a role as an
18 expert within potential on the plaintiff side, I
19 think there was some. One case come up to mind
20 for me is St. Croix in the U.S. Virgin Islands. I
21 did some work there for evaluating contamination
22 at the refinery, former refinery.

23 Q. So I read something about that.

24 In that case, you were hired by the

1 government, right, of St. Croix?

2 A. A law firm and I think the law firm
3 was actually representing the government of
4 St. Croix.

5 Q. Right.

6 A. That's -- that's what I recall.

7 Q. So -- so can you recall ever working
8 on a case where you were retained by lawyers who
9 were representing people who claimed they had been
10 injured because they were exposed to contaminants
11 in the environment?

12 A. Yeah, I understand your question and
13 I, you know, I have been retained maybe in several
14 dozen cases that and probably -- and the cases I'm
15 talking about went to either deposition or trial
16 appearances. But there are also many other cases
17 where I was retained that never went to deposition
18 or, you know, they settled, those things, like
19 those things.

20 And my goal of this, specifically
21 right now, I cannot give you one specifically
22 right now, but I believe there might have been
23 some.

24 Q. But you can't identify -- just let

1 me finish the question.

2 As you sit here today, you can't
3 identify a case where a lawyer representing
4 someone injured from exposure to a toxic substance
5 hired you as an expert; is that fair?

6 A. Right now I cannot --

7 Q. Okay.

8 A. -- give you a case.

9 Q. Okay. Would it also be fair to say
10 that the majority of your litigation work has been
11 either on behalf of industry or the government?

12 A. Well, as far as a number of cases
13 are concerned, I have worked for plaintiffs and
14 defendants. I have worked for the government, but
15 I have also worked for utilities. I have, you
16 know, and I have worked for organizations, as I
17 mentioned before.

18 And if you -- if you were to count
19 the number of cases for plaintiffs, number of
20 cases for non-plaintiffs, I mean, maybe a third
21 for plaintiffs and the rest for non-plaintiffs.

22 Q. Right.

23 A. But some -- some of the plaintiffs
24 work may be a bit shorter sometimes.

1 Q. But some of the plaintiffs you
2 worked for were industry; right? Sometimes it's
3 one company suing another company?

4 A. No, no, no. You have some of that,
5 but you have some which are basically
6 associations, for example, having issues with
7 sewer systems or -- or, you know, I did work for
8 the Hudson River organization. So you have some
9 of those and those are -- I would put them in the
10 bucket of plaintiffs.

11 Q. Okay. But the majority of your work
12 has been on behalf of industry or the government
13 that's litigation related; right? More than half?

14 A. If you -- if you sum government plus
15 industry, it may be little bit more than half.

16 Q. Okay. I'm going to ask you about
17 your areas of expertise.

18 On your CV on the right-hand side
19 like the blue portion, it gives example areas of
20 expertise.

21 Do you see that?

22 A. Example? Yes, I see that.

23 Q. Okay. And in addition, like in that
24 first paragraph, you wrote:

1 "His areas of expertise include" and
2 it says "the analysis of geochemical fingerprints
3 for organic and inorganic compounds including
4 radionuclides and stable isotopes, the evaluation
5 of the timing of chemical releases, the allocation
6 of responsibilities for cost allocation, and
7 geochemical modeling."

8 Do you see that?

9 A. You're talking about the first
10 paragraph of the CV?

11 Q. Yes.

12 A. Yeah. Well, it sounds right.

13 Q. Okay. Do you consider yourself to
14 be an expert in groundwater modeling?

15 A. Well, I am educated in groundwater
16 modeling. I'm -- I have a university degree and I
17 hold geologies that included that, but my company
18 is really a leader in that and we have people in
19 the company that are, you know, that I rely upon
20 for -- for modeling specifically.

21 Q. Sure. I understand that. So I'm
22 not questioning anything about your company or
23 anyone else. I'm just talking about you.

24 Do you -- do you yourself to be an

1 expert in groundwater modeling?

2 A. I am educated in groundwater
3 modeling and you have to define what an expert is.

4 Q. Okay. So your education in
5 groundwater modeling was from your diploma from
6 Switzerland; is that right?

7 A. That's correct.

8 Q. In 1980?

9 A. That's correct.

10 Q. Okay. Have you --

11 A. I would add, plus the exposures that
12 I have had through the years being working in a
13 firm that does a lot of groundwater modeling.

14 Q. Okay. Have you published any
15 articles in the peer-reviewed literature regarding
16 groundwater modeling, either flow or fate and
17 transport or any other kind of groundwater
18 modeling?

19 MS. O'LEARY: Object to form.

20 THE WITNESS: Combined with
21 geochemical modeling, I have actually,
22 you know, done some movement of certain
23 contaminant in the subsurface.

24 You need both. You need what

1 makes it move is actually the groundwater
2 movement, and the geochemical aspect of
3 it is -- is -- was part of that.

4 And I believe -- I believe I
5 have -- I co-authored a paper on
6 some -- on one case, maybe four. That
7 was arsenic, as I recall.

8 BY MS. BAUGHMAN:

9 Q. Okay. So you've got your CV in
10 front of you --

11 A. Yes.

12 Q. -- which has a publication list.
13 Can you identify which peer-reviewed
14 publications you have that you're an author of
15 that are concerned with groundwater modeling?

16 A. Yes, that is. By that you mean that
17 is an aspect of groundwater modeling included in
18 it and -- and that's important.

19 I -- the papers that I published
20 were the second one on the list, Bessinger and
21 Hennet 2019. So that's the one I was that came to
22 mind when you asked me that question. And in that
23 one, you had movement of arsenic and its reaction,
24 its fate and transport, when water recharges to an

1 aquifer and so that's -- that one combined some
2 groundwater flow.

3 Q. Any others? I just need the list
4 for now. Any others?

5 A. Yeah.

6 MS. O'LEARY: Object to form.

7 THE WITNESS: Be patient.

8 It's a long list. So.

9 (Reviews document.)

10 I believe the 2007 paper with
11 Soderberg in it. Soderberg is
12 S-o-d-e-r-b-e-r-g. Also involved some
13 combination of geochemistry and
14 groundwater movement.

15 BY MS. BAUGHMAN:

16 Q. Okay. You know what? Let's -- let
17 me withdraw that question and I'm going ask you a
18 different question.

19 Let me ask you this.

20 Have you yourself ever -- ever
21 developed a groundwater flow model?

22 A. Yes, I have, as part of my
23 education.

24 Q. Okay. When you were in school?

1 A. When I was at the university, yes.

2 Q. Okay.

3 A. That was part of what we will do.

4 Q. Okay. After you graduated in 1980
5 from -- with that diploma from Switzerland, have
6 you developed a groundwater model since then?

7 MS. O'LEARY: Object to form.

8 THE WITNESS: Simple, simple
9 model, if you want to call it a model,
10 calculations of groundwater movement and
11 so on. I have done that.

12 BY MS. BAUGHMAN:

13 Q. Okay. I'm not talking about
14 calculations. I'm talking about an actual model.

15 MS. O'LEARY: Object to form.

16 THE WITNESS: Well, define a
17 model. A model is a set of calculations.

18 BY MS. BAUGHMAN:

19 Q. Okay. You're familiar with the type
20 of model that we're talking about here in this
21 case that the ATSDR developed; correct?

22 MS. O'LEARY: Object to form.

23 THE WITNESS: Yes, I have -- I
24 have looked at it, yes.

1 BY MS. BAUGHMAN:

2 Q. Okay. Have you ever run that model?

3 A. Personally I have not. That was
4 done by my colleague.

5 Q. Okay. Have you ever -- so the ATSDR
6 developed multiple groundwater models that are at
7 issue in this litigation; fair? It's more than
8 one; right?

9 A. It's two.

10 Q. Okay. Have you developed a
11 different groundwater model related to Camp
12 Lejeune?

13 MS. O'LEARY: Object to form.

14 THE WITNESS: Again, it's
15 definition of a model. If a model is a
16 calculation, I have done calculation.

17 BY MS. BAUGHMAN:

18 Q. Okay. And those are the
19 calculations discussed in your report?

20 A. Yes.

21 Q. Okay. Did you assess the model bias
22 for your groundwater flow model that you've done
23 for Camp Lejeune?

24 A. Can you explain what you mean by

1 "bias"?

2 Q. Well, let me ask you this.

3 What sensitivity or uncertainty
4 analysis did you do for your groundwater model for
5 Camp Lejeune?

6 A. I --

7 MS. O'LEARY: Object to form.

8 BY MS. BAUGHMAN:

9 Q. If any.

10 A. What I -- what I did did not require
11 that because it is included in -- in it because --
12 because of the lack of data and so on and, you
13 know.

14 Q. Okay. So did you do a sensitivity
15 analysis for what you're calling your model for
16 Camp Lejeune?

17 MS. O'LEARY: Object to form.

18 THE WITNESS: I didn't do a
19 sensitivity analysis.

20 BY MS. BAUGHMAN:

21 Q. Okay. Did you do an uncertainty
22 analysis for what you're calling your model for
23 Camp Lejeune?

24 MS. O'LEARY: Object to form.

1 THE WITNESS: I didn't do
2 specifically an uncertainty analysis.

3 I am just aware that you have
4 a very large amount of uncertainty for
5 whoever makes calculations when you have
6 no data.

7 BY MS. BAUGHMAN:

8 Q. Your -- your testimony is there's no
9 data, literally none, zero data related to Camp
10 Lejeune.

11 Is that what you're saying?

12 A. Well, you have very limited data as
13 far as -- as contamination is concerned and then
14 you have site-specific data and you have
15 basically, you know, hydrological framework that
16 is simplified, and all of that has a lot amount of
17 uncertainty.

18 Q. Have you ever made a presentation at
19 a conference regarding groundwater flow or fate
20 and transport modeling?

21 MS. O'LEARY: Object to form.

22 THE WITNESS: I believe so.

23 BY MS. BAUGHMAN:

24 Q. Okay. Have you ever received an

1 honor or award from your work on groundwater
2 modeling?

3 MS. O'LEARY: Object to form.

4 THE WITNESS: Not on
5 groundwater modeling, no.

6 BY MS. BAUGHMAN:

7 Q. Have you ever published anything
8 related to Camp Lejeune?

9 A. No.

10 Q. Have you ever made a presentation, a
11 public presentation at a conference, for example,
12 related to Camp Lejeune?

13 A. No.

14 Q. Okay. Are you an epidemiologist?

15 A. I am not an epidemiologist.

16 Q. Are you a toxicologist?

17 A. I am not a toxicologist.

18 Q. Have you reviewed any of the
19 epidemiology studies published by the ATSDR
20 regarding Camp Lejeune?

21 A. I recall having seen some of that.

22 Q. So I reviewed your Exhibit 34, your
23 Supplemental and Corrected Reliance List, and I
24 did not see any of the published peer-reviewed

1 epidemiology studies that Dr. Bove and others have
2 published regarding Camp Lejeune listed on your
3 reliance list.

4 Did you review those epidemiology
5 studies as part of your work on this case?

6 MS. O'LEARY: Object to
7 foundation and form.

8 THE WITNESS: Not on this
9 case. I am not relying on that on this
10 case.

11 BY MS. BAUGHMAN:

12 Q. Okay. Have you yourself ever
13 conducted an exposure assessment for an individual
14 person, in other words, to determine how much of a
15 chemical the person was exposed to by inhalation,
16 ingestion, and/or dermal contact?

17 A. No. I have -- I have worked on
18 issues that relate to geochemistry and
19 hydrogeology that deal with concentrations and --
20 but I don't go to the exposure. I don't go to the
21 inhalation. I don't go to those kinds of things.

22 Q. Okay. Is that because calculating
23 the exposure for individual person is not part of
24 the -- your expertise?

1 MS. O'LEARY: Object to form.

2 THE WITNESS: It's not what I
3 do.

4 BY MS. BAUGHMAN:

5 Q. Okay. What about -- I think I know
6 the answer.

7 But for this case, the Camp Lejeune
8 litigation, have you calculated the exposure of
9 any individual person to the contaminants at Camp
10 Lejeune?

11 A. I have not done such calculations
12 that will be specific like that.

13 Q. So can you identify, as you sit here
14 today, any individuals or any group of individuals
15 that you would say were substantially exposed to
16 contaminated water at Camp Lejeune?

17 MS. O'LEARY: Object to form.

18 THE WITNESS: What I have
19 done is, I have reviewed the information
20 and the data, and I have made my
21 conclusions that are in my report for
22 this case.

23 And, you know, there is
24 another case I worked on which is

1 different from this one where I looked at
2 concentration potential in the water
3 supply, in the waters that was basically
4 supplied to the person for small period
5 of time. That's the Washington case if I
6 recall.

7 BY MS. BAUGHMAN:

8 Q. The Baby Washington case; right?

9 A. Yeah, so I have done that, but for
10 this case for this report, I have not done. I
11 have just looked at the geochemistry and the
12 hydrogeology and the geology.

13 Q. Okay. So you're not going to offer
14 an opinion to any of the judges in this case about
15 any individual person or any group of people as to
16 whether they were or were not substantially
17 exposed to contaminated water at Camp Lejeune; is
18 that fair?

19 MS. O'LEARY: Object to form
20 and foundation.

21 THE WITNESS: Yeah, I am not
22 providing opinions that are not in my
23 report.

24 BY MS. BAUGHMAN:

1 Q. Okay. And that's not in your
2 report, is it?

3 A. It is -- it is not in my.

4 Q. Okay.

5 A. Because the opinions in my report
6 speak for themselves.

7 Q. Okay. And you have not offered an
8 opinion in your report about whether any
9 individual person or any group of people was
10 substantially exposed to contaminants at Camp
11 Lejeune; fair?

12 MS. O'LEARY: Object to form.

13 THE WITNESS: I have not done
14 that for people, no.

15 BY MS. BAUGHMAN:

16 Q. Okay. Have you ever developed or
17 used a water model to determine contaminant
18 concentrations that would be used for an
19 individual exposure determination?

20 MS. O'LEARY: Object to
21 foundation.

22 THE WITNESS: Not that I can
23 recall here.

24 BY MS. BAUGHMAN:

1 Q. Okay.

2 A. With the exception of -- well, there
3 is no exception.

4 Q. Okay.

5 A. I cannot recall.

6 Q. I'm going to ask you a few questions
7 about the experts for the plaintiffs in this case.
8 Okay? I'll -- I'll ask one by one.

9 Let me ask you about Dr. Leonard
10 Konikow or Lenny Konikow.

11 Do you know him?

12 A. I know him socially.

13 Q. Okay. Have you ever worked with
14 Dr. Konikow?

15 A. No.

16 Q. Okay. Are you aware of his
17 reputation in the hydrogeology or groundwater
18 field?

19 A. Yes. He's a reputable
20 hydrogeologist that worked for the USGS.

21 Q. Reputable; is that what you said?

22 A. Yeah.

23 Q. Okay. What about Morris Maslia? Do
24 you know him personally?

1 A. I do not.

2 Q. Okay. You've never worked with
3 Morris then, I assume?

4 A. With who?

5 Q. Mr. Maslia?

6 A. No, I have not.

7 Q. Okay. Norm Jones and Jeff Davis,
8 the two individuals who did the post-audit.

9 Do you know them?

10 A. I do not.

11 Q. Are you aware of their reputation in
12 the hydrogeology or groundwater modeling
13 community?

14 A. I do not.

15 Q. Okay. Dr. David Sabatini. Do you
16 know him?

17 A. Except for this case, I have never
18 met him or I don't know him.

19 Q. Okay. And are you aware of his
20 professional reputation?

21 A. No.

22 Q. Okay. Have you ever communicated
23 with Dr. Clement regarding Camp Lejeune?

24 A. Dr. What?

1 Q. Clement. The individual who wrote
2 part of the NRC report and published an article.
3 He's discussed, I believe, in your report.

4 A. No.

5 Q. He's certainly discussed in
6 Dr. Spiliotopoulos's report.

7 A. Yeah, I --

8 MS. O'LEARY: Object to form.

9 THE WITNESS: I do not know
10 him.

11 BY MS. BAUGHMAN:

12 Q. You don't know Dr. Clement?

13 A. I don't.

14 Q. Okay. So, obviously, you have not
15 communicated with him about Camp Lejeune then?

16 A. I don't believe so.

17 MS. BAUGHMAN: Okay. Let me
18 see here.

19 (Document marked for
20 identification as Exhibit 35.)

21 (Document marked for
22 identification as Exhibit 36.)

23 (Document marked for
24 identification as Exhibit 37.)

1 BY MS. BAUGHMAN:

2 Q. Okay. I am going to hand you in a
3 moment. I need to read this out first.

4 I'm going to hand you what I've
5 marked as Exhibits 35, 36, and 37 to your CV, and
6 those are a series of documents with the first
7 part of the Bates stamp series saying
8 CLJA_SSPA_INVOICES, and then there are numbers.
9 35 goes 1 through 41, 36 goes 43 through 287, and
10 then 37 goes 288 through 407. Okay?

11 And I believe these are all of the
12 invoices that have been produced to us regarding
13 SSPA's -- that's S.S. Papadopoulos & Associates --
14 work related to Camp Lejeune?

15 A. Thank you.

16 Q. And can you confirm that for me?

17 A. What is your question?

18 Q. Okay. Are Exhibits 35, 36, and 37
19 SSPA's invoices regarding work related to Camp
20 Lejeune?

21 MS. O'LEARY: Object to
22 foundation.

23 THE WITNESS:

24 (Reviews document.)

1 MS. O'LEARY: Also object to
2 form.

3 THE WITNESS:
4 (Reviews document.)

5 MS. O'LEARY: Dr. Hennet, are
6 you waiting for a question or?

7 MS. BAUGHMAN: I asked you a
8 question.

9 Could you repeat it, please?
10 (The reporter read the record
11 on page 343 lines 18-20.)

12 THE WITNESS: They appear to
13 be. I am not the one who make this kind
14 of invoices. I am not making invoices.
15 I am not doing the administrative work at
16 SSPA.

17 BY MS. BAUGHMAN:

18 Q. Okay. But you've just spent a few
19 minutes flipping through Exhibits 35, 36, and 37,
20 and those appear to be invoices from your company,
21 SSPA; correct?

22 A. It appears to be.

23 Q. And they are related to Camp
24 Lejeune; correct?

1 A. Well, I believe so.

2 Q. Okay. And they document work from
3 2005 all the way until February of 2025 related to
4 Camp Lejeune; correct?

5 MS. O'LEARY: Object to
6 foundation.

7 THE WITNESS: 2005?

8 BY MS. BAUGHMAN:

9 Q. Yes.

10 A. I -- I'm sorry. I didn't spot any
11 2005 invoices.

12 Q. Let's see. Let's look.
13 If you look at Exhibit 36.

14 A. Yes.

15 Q. Hold on a minute.

16 No, I'm sorry, Exhibit 37. And turn
17 to the one that's stamped page 340.

18 A. Yeah.

19 Q. So at page 340, let me ask you about
20 this.

21 This is a page -- from 340 until 345
22 is a timesheet backup report for billing to the
23 DOJ of SSPA from January 23, 2005 until
24 October 27, 2007.

1 Do you see that?

2 A. I see that.

3 Q. Okay. And then if you turn to page
4 346, that invoice is for professional services
5 rendered for the period January 23, 2005 until
6 March 19, 2005.

7 Do you see that?

8 A. I see that.

9 Q. And based on the testimony you've
10 given today and in the prior deposition, you
11 didn't work on Camp Lejeune-related matters for
12 the DOJ before January 23, 2005; right?

13 MS. O'LEARY: Object to
14 foundation.

15 THE WITNESS: That's my
16 understanding.

17 BY MS. BAUGHMAN:

18 Q. Okay. So and then -- and then in
19 terms of the range of what we've got here, if you
20 go to Exhibit 35 and you go to the end of that,
21 page 42.

22 A. Wait. Hold on. Page?

23 Q. 41 actually.

24 A. Yes.

1 Q. So that invoice is for services
2 rendered through January 31, 2025.

3 Do you see that?

4 A. Yes.

5 Q. Okay. I'm guessing you don't know
6 the answer.

7 I've just established we have a
8 range of invoices that start in January of 2005
9 and end in January 2025.

10 To the best of your knowledge, have
11 all of the invoices for SSPA's work related to
12 Camp Lejeune been produced to the plaintiffs in
13 this case?

14 MS. O'LEARY: Object to form
15 and foundation.

16 BY MS. BAUGHMAN:

17 Q. In that time frame.

18 MS. O'LEARY: Same objections.

19 THE WITNESS: I am not the
20 one who produce those. So I don't know.

21 BY MS. BAUGHMAN:

22 Q. Okay.

23 A. But I suppose they're all there.

24 Q. I mean, you haven't purposefully

1 told anyone to not produce any of them, have you?

2 A. I have not. I have nothing to do
3 with this.

4 Q. Okay. You're aware that there were
5 motions filed and, as a result of that, that the
6 DOJ attempted to produce all of the invoices, that
7 SSPA had to go and look for these.

8 Are you aware of that?

9 MS. O'LEARY: Object to
10 foundation.

11 THE WITNESS: Vaguely, yes.
12 I was out of the country for, you know,
13 two and a half weeks. I just came back
14 this weekend, and I think that all
15 happened during that period of time.

16 BY MS. BAUGHMAN:

17 Q. Okay.

18 A. And I, you know, so if -- if you
19 requested all the invoices from my -- from my
20 shop, from SSPA, I suppose that I will have done
21 the best I could to provide that.

22 Q. And you certainly wouldn't have
23 withhold them?

24 A. Pardon?

1 Q. You would not have withheld them?

2 MS. O'LEARY: Object to form.

3 THE WITNESS: No, I --

4 BY MS. BAUGHMAN:

5 Q. And, obviously, you flipped through
6 these documents.

7 SSPA has a logo; right?

8 A. SSPA has a logo, yes.

9 Q. And so on page -- on Exhibit 35 at
10 the top of the page, that's SSPA's logo; right?

11 A. Yes, it is.

12 Q. And it appears, at least we can tell
13 on the first page of each Exhibit 35, 36, and 37,
14 it's all the same logo; right?

15 A. Yeah, except that it's in color --

16 Q. Right.

17 A. -- on the first one and not in the
18 other one.

19 Q. Got it.

20 So let me ask you something.

21 If you look at Exhibit 35 and you go
22 to the last page, which is page 42.

23 A. Yes.

24 Q. Okay. The billed to date on that

1 invoice, which is invoice 27722, is 2 million
2 400 -- I'm sorry -- \$2,004,131.67.

3 Do you see that?

4 A. I see 2 million 216.

5 Q. That's the budget.

6 A. Oh, that's the budget. Okay.

7 Q. If you go down to billed to date?

8 A. Okay. I'm sorry. I see that.

9 Q. Okay. So billed to date as of
10 January 31, 2025 was just over \$2 million; right?

11 A. That's what it appears to be.

12 Q. Okay. But that's just for -- that's
13 just for the litigation that we're here for today.

14 That doesn't include the prior
15 litigation matters; correct?

16 MS. O'LEARY: Object to form
17 and foundation.

18 THE WITNESS: That's my
19 understanding.

20 BY MS. BAUGHMAN:

21 Q. Okay. Do you know what the total
22 amount of money is that SSPA has billed DOJ for
23 all of your Camp Lejeune-related work 2005 to
24 present?

1 A. I do not know.

2 Q. Okay. But we could add up all of
3 these invoices and come up with a number and that
4 would be the number as far as you know; correct?

5 MS. O'LEARY: Object to
6 foundation.

7 THE WITNESS: Specifically I
8 do not know. I suppose.

9 BY MS. BAUGHMAN:

10 Q. Okay.

11 A. If you -- if you add those numbers,
12 maybe you -- you get a number somehow.

13 Q. Is there any reason that you're
14 aware of that if we added up all of the invoices
15 from Exhibits 35, 36, and 37 and came up with a
16 number, is there any reason you're aware that that
17 would not be the correct number for the amount of
18 money that SSPA has billed DOJ for Camp
19 Lejeune-related work?

20 MS. O'LEARY: Object to
21 foundation.

22 THE WITNESS: I suppose this
23 speaks for itself. I have nothing to do
24 with this -- this piece of work.

1 BY MS. BAUGHMAN:

2 Q. Can you identify any reason that
3 that wouldn't work out as the appropriate
4 methodology, can you?

5 MS. O'LEARY: Object to form.

6 THE WITNESS: I cannot see
7 any why reason it couldn't be.

8 MS. BAUGHMAN: Okay.

9 MS. O'LEARY: And would now be
10 a good time for a short bio break?

11 MS. BAUGHMAN: Yes.

12 THE WITNESS: Yeah. That's
13 right. I was going to ask for that as
14 well.

15 THE VIDEOGRAPHER: The time is
16 10:18. We are going off the record.

17 (A recess was taken.)

18 THE VIDEOGRAPHER: The time is
19 10:28 AM. We are now on the record.

20 BY MS. BAUGHMAN:

21 Q. Okay. All right. Dr. Hennet, I'm
22 going to ask -- I want to ask you some questions
23 about -- we're going to talk about the spiractor
24 fall height issue, but let me give you some

1 exhibits so that we have some things to talk
2 about.

3 I'm going to hand you first what
4 I've marked as Exhibit 38 to your deposition.

5 (Document marked for
6 identification as Exhibit 38.)

7 BY MS. BAUGHMAN:

8 Q. And it is the AH Environmental
9 report from December 2004 CLJA water modeling
10 01-000071446 through 71512. There you go.

11 A. Thank you.

12 Q. I'm also going to hand you this one
13 was marked at your deposition in March as Exhibit
14 11. So I'm not going to re-mark it. I'll just
15 refer to that as Exhibit 11 but give you a copy.
16 And those are your notes that you took from your
17 February 2025 Camp Lejeune site visit; correct?

18 A. Yes.

19 Q. Okay. Now I'm going to hand you
20 what I've marked as Exhibit 39 to your deposition.

21 (Document marked for
22 identification as Exhibit 39.)

23 BY MS. BAUGHMAN:

24 Q. And these are HENNET_USA_ a whole

1 bunch of 0s and it's 1 through 96.

2 And can you tell me. Are those the
3 photographs that were taken at your February 2025
4 site visit?

5 MS. O'LEARY: Object to
6 foundation.

7 THE WITNESS:
8 (Reviews document.)

9 It look like -- it looks like
10 it.

11 BY MS. BAUGHMAN:

12 Q. Okay. And now I'm going to hand you
13 what I've marked as Exhibit 40 to your deposition.

14 (Document marked for
15 identification as Exhibit 40.)

16 BY MS. BAUGHMAN:

17 Q. And this is CLJA PHOTOS SSPA 1
18 through 45.

19 And my question for you is: Is
20 Exhibit 40 photographs that were taken of your
21 visit in May 2024 to Camp Lejeune for this
22 litigation?

23 MS. O'LEARY: Object to
24 foundation.

1 MS. BAUGHMAN: Foundation
2 meaning he doesn't know if these are
3 photos? Is that what you're saying?

4 MS. O'LEARY: Yeah, I don't
5 know that. I mean, this is the produced
6 versions. I don't know what he's seen.
7 I believe he testified that he wasn't the
8 one who took photographs.

9 MS. BAUGHMAN: Okay. Well,
10 let's -- let's do this. For Exhibit 40
11 if you turn to --

12 So I guess to establish a
13 foundation for this, your -- your
14 position is that we have to call the
15 attorneys for DOJ who took the photos?

16 MS. O'LEARY: I think you
17 might need to ask him more specific
18 questions about what he saw.

19 THE WITNESS:

20 (Reviews document.)

21 BY MS. BAUGHMAN:

22 Q. Okay. Turn to page 17 of Exhibit
23 40.

24 Who's that a picture of?

1 A. I'll get there.

2 I am there.

3 It's a picture of myself and of
4 Dr. Alexander Spiliotopoulos.

5 Q. Okay. And where are you?

6 A. I am -- on the picture, I am on the
7 right.

8 Q. No.

9 Where are you in the photo?

10 A. Oh.

11 Q. Where are you standing?

12 MS. O'LEARY: Objection.

13 Form.

14 BY MS. BAUGHMAN:

15 Q. Where was the photo taken at?

16 A. Right. That's near building 670
17 at -- at Camp Lejeune.

18 Q. Okay. And what's building 670? Do
19 you remember?

20 A. Yeah. It's one of the water
21 treatment plant.

22 Q. Which one?

23 A. I think it's -- it is the Holcomb
24 Boulevard Water Treatment Plant.

1 Q. All right. And where were you? Do
2 you remember when this photo was taken?

3 A. Exactly not, but I'm sure it's in
4 the record somewhere.

5 Q. Okay. Is it one of the times that
6 you visited Camp Lejeune as part of this case?

7 A. Yes.

8 Q. Okay. And then if you turn to page
9 45, the last page of Exhibit 40, is that also a
10 picture of you and Dr. Spiliotopoulos?

11 A. Yes.

12 Q. At Camp Lejeune?

13 A. Yes.

14 Q. Okay. So is Exhibit 40 pictures of
15 your visit -- one of your visits prior to 2025 at
16 Camp Lejeune?

17 A. I believe so.

18 Q. Okay. So if we look at your report,
19 Exhibit 31. Your calculations -- let's see.
20 Let's look at page 5-6 of your report.

21 Are you at page 5-6?

22 A. Yes, I am.

23 Q. Okay. And that is Exhibit 2-4. "COC
24 Volatilization Losses at Hadnot Point Water

1 Treatment Plant"; correct?

2 A. Yes.

3 Q. So this documents how you made your
4 calculations regarding volatilization losses for
5 Hadnot Point; correct?

6 MS. O'LEARY: Object to
7 foundation.

8 THE WITNESS: Yes, that is
9 information that support that. Yes.

10 BY MS. BAUGHMAN:

11 Q. Right. From your report?

12 A. That's in my report.

13 Q. Okay. So if you look at the fall
14 height in the middle of Exhibit 2-4, the fall
15 height is listed as 0.675 meters; right?

16 A. Yes.

17 Q. Okay. And 0.675 meters is 24
18 inches; is that right?

19 A. About two feet, yeah.

20 Q. Two feet is 24 inches?

21 A. (Nods head).

22 Q. Yes?

23 A. Yes.

24 Q. Okay. And then -- so it's

1 clear -- it's true that when you -- for your
2 calculations of volatilization at the spiractor at
3 Hadnot Point, you assumed a fall height of 2 feet;
4 correct?

5 A. That's what -- that's what I recall
6 with, yes.

7 Q. Okay. And that's what's documented
8 in your report?

9 A. Yes.

10 Q. Okay. And then if you turn to page
11 5-9 of your report, that's Exhibit 2-5. "COC
12 Volatilization Losses at Tarawa Terrace Water
13 Treatment Plant"; correct?

14 A. Yes.

15 Q. Okay. And you have a fall height
16 and it's also listed as 0.675; correct?

17 A. Yes.

18 Q. So for your calculations of the fall
19 height at Tarawa Terrace, you also assumed 2 feet
20 or 22 inches is the fall height; correct?

21 A. Yes.

22 Q. Okay. So let's look at Exhibit 38,
23 the AH Environmental report. And if you could
24 turn to page -- it's 3-10 in the report. The

1 Bates stamp numbers last three digits or last five
2 digits are 71475.

3 You see that?

4 A. Not yet.

5 Yes.

6 Q. Okay. So this is a diagram prepared
7 by AH Environmental regarding the fall height of
8 the spiractor; correct?

9 A. Yes.

10 Q. And you're aware that AH
11 Environmental made calculations regarding
12 volatilization loss at the spiractor; correct?

13 A. Yes.

14 Q. Using the same formula as you, but
15 they used 1 foot or 12 inches for the fall height
16 instead of 2 feet; correct?

17 MS. O'LEARY: Object to
18 foundation.

19 THE WITNESS: It's kind of
20 reverse. I used the same formula as
21 they.

22 BY MS. BAUGHMAN:

23 Q. You used the same formula as AH?

24 A. Yes.

1 Q. But you used 2 feet and they used 1;
2 right?

3 A. Yes.

4 Q. All right. Let me ask you.
5 Have you -- have you spoken to
6 anyone from AH Environmental regarding the report,
7 Exhibit 38, their December 2004 report?

8 A. I have not.

9 Q. Okay. And just more broadly, have
10 you spoken to anyone from AH Environmental
11 regarding the spiractors and the fall height
12 issue?

13 A. No, I have not.

14 Q. Okay. Do you know Dr. Peter
15 Pommerenk?

16 A. I do not know him.

17 Q. Have you ever spoken to
18 Dr. Pommerenk about anything related to Camp
19 Lejeune?

20 A. I don't believe so.

21 Q. Okay. What about anyone who worked
22 for SSPA? To your knowledge, has anyone reached
23 out to Dr. Pommerenk or AH regarding any of the
24 subject matter in Exhibit 38, the AH Environmental

1 2004 report?

2 A. Not to my knowledge.

3 Q. Okay. I want to ask you.

4 The first page of Exhibit 38 says
5 that this report was prepared for the
6 Environmental Management Division at Camp Lejeune.

7 Do you see that?

8 A. I see that.

9 Q. And on page 1 of the report, which
10 is at 1-1 I think is what they refer to it as, at
11 the bottom of the page under Purpose, the last
12 full paragraph it says "AH Environmental
13 consultants was retained by MCB"; right?

14 Which is MCB Camp Lejeune under
15 contract number and then there's a number;
16 correct?

17 A. Correct.

18 MS. O'LEARY: Object to form.

19 BY MS. BAUGHMAN:

20 Q. So I just wonder.

21 In your report, you -- you refer
22 multiple times to the AH report as something that
23 was commissioned by ATSDR.

24 Were you aware that AH was actually

1 retained by Marine Corps Base Camp Lejeune to do
2 this work?

3 A. I know that by memory that somewhere
4 they say that they were -- on the first page, it's
5 written "ATSDR Support - Estimation of VOC
6 Removal."

7 Q. I'm sorry. Which page are you
8 referring to? Page 1-1?

9 A. No. I'm on the first, the cover
10 page of Exhibit 38.

11 Q. Okay. It says "ATSDR Support," but
12 who paid for the study?

13 A. Oh, I don't know.

14 Q. Who hired AH Environmental to do the
15 study?

16 A. I don't know.

17 Q. Doesn't it say in the report that
18 they were hired by Marine Corps Base Camp Lejeune?

19 MS. O'LEARY: Object to form
20 and foundation.

21 The next part of the sentence
22 you read said it was to assist ATSDR in
23 obtaining information.

24 MS. BAUGHMAN: I'm going to

1 object. That is a speaking objection.
2 That is a violation of the local rules
3 and the federal rules. I ask that you
4 not do it again.

5 MS. O'LEARY: I ask you not to
6 misrepresent -- misrepresent the record.

7 MS. BAUGHMAN: I am not
8 misrepresenting anything.

9 BY MS. BAUGHMAN:

10 Q. Dr. Hennet, who paid AH
11 Environmental to do this report?

12 A. I do not who paid them.

13 Q. Okay. Who hired AH Environmental?

14 A. I do not know who exactly hired
15 them.

16 Q. Okay. Do you know whether AH
17 Environmental, in fact, was a consultant of the
18 Navy and the Marine Corps related to Camp
19 Lejeune-related matters?

20 A. Could be.

21 Q. You don't know either way?

22 A. I don't know either way.

23 Q. Okay. So turn please to page 4-2 of
24 the AH report. There is a sentence in the middle

1 of page 4-2 that says:

2 "Because of the downstream
3 recarbonation basin at that plant" -- and let's
4 back up for a second.

5 There's a recarbonation basin at the
6 Hadnot Point Water Treatment Plant; correct?

7 A. Can you repeat because I was
8 reading. Sorry.

9 Q. Okay. There is a recarbonation
10 basin at the Hadnot Point Water Treatment Plant;
11 correct?

12 A. That's correct.

13 Q. Is there a recarbonation basin at
14 Tarawa Terrace, or was there one?

15 A. I don't believe so.

16 Q. Okay. Was there a recarbonation
17 basin or is there one at Holcomb Boulevard Water
18 Treatment Plant?

19 A. I have to refresh my memory on this
20 one. I don't believe so.

21 Q. Okay. So -- so you see the sentence
22 right above it says:

23 "This variability is illustrated in
24 pictures taken at the Hadnot Point Water Treatment

1 Plant."

2 Okay. And then they're talking
3 about a vortex that formed, and then the next
4 sentence says:

5 "Because of the downstream
6 recarbonation basin at that plant" -- referring to
7 Hadnot Point -- "the available head does not
8 appear to allow a fall height of greater than
9 approximately one foot and the effluent pipe is
10 likely to be flowing full."

11 Do you see that?

12 A. I see that.

13 Q. Okay. Were you able to observe at
14 any time that you were at the Hadnot Point Water
15 Treatment Plant the available head given the
16 presence of the recarbonation basin?

17 A. No, but I measured it. I measured
18 the pipe.

19 Q. I'm not talking about the pipe.
20 Head refers to the -- the elevation
21 of the water, does it not?

22 A. Well, head refers to a difference of
23 elevation.

24 Q. Okay. Of the water; right?

1 A. Yes.

2 Q. Okay.

3 A. For water, yes.

4 Q. Okay. When you made your
5 measurement at Hadnot Point of the spiractor,
6 there was no water in the spiractor at the time;
7 correct?

8 A. For the February 11 measurements,
9 yes.

10 Q. Okay.

11 A. Not in the one I measured, yes.

12 Q. Okay. Let's back up.
13 Let's just talk about February 11,
14 2025.

15 When you made your measurements on
16 that date, the spiractor did not have water in it;
17 correct?

18 A. That specific spiractor. You have
19 five of them.

20 Q. Okay. Did you make a measurement at
21 a spiractor that did have water in it on
22 February 11, 2025?

23 A. Couldn't be done, no.

24 Q. Okay. So did you at any point in

1 time make a measurement in a spiractor at any
2 water treatment plant at Camp Lejeune that had
3 water in it?

4 A. I did not do measurements when the
5 spiractor was flowing water.

6 Q. Okay.

7 A. I couldn't.

8 Q. So I want to focus on Hadnot Point
9 and the effect of the recarbonation basin on the
10 water level in the spiractor.

11 Do you agree with AH that the
12 head -- the available head does not appear to
13 allow a fall height of greater than approximately
14 one foot at the spiractor at Hadnot Point?

15 A. I do not agree with that, and I
16 would go back to Figure 3-4 of the AEH report,
17 which is on page 3-10 that you just referred to
18 before. And there you can see where they put --
19 where they put the 12 inches, which is I think is
20 what it is. It appears to be. I didn't measure
21 it.

22 And then you can see there that the
23 fall height is 12 inches. The pipe is not flowing
24 full as claimed. And -- and I made some estimates

1 of for the flow you have through that pipe and the
2 dimension of 12-inch for the pipe, the 6-inch that
3 they have at the bottom would be -- would be
4 basically the -- where the water level would be in
5 the pipe when it normally flows.

6 Q. Well, what's in the diagram on
7 Figure 3-4 is not consistent with the text on page
8 4-2; correct? Because 4-2 says "the effluent pipe
9 is likely to be flowing full."

10 A. Right. That's inconsistent.

11 Q. Right.

12 A. And -- and I would -- I would refer
13 to -- to the diagram because for the diagram for
14 the estimate of the 6-inch, I made a calculation
15 for the flow and the size of the pipe that
16 basically the water level would be approximately 6
17 inches in it. That's what I recall.

18 Q. Okay. You're saying that AH
19 Environmental did that, correct, not you?

20 A. AH Environmental did that and
21 on -- on the statement in the -- in the text, it's
22 -- it's a speculative statement because it says
23 "it appears to be" and that's based on visual
24 interpretation, which -- which are subjective in

1 that sense.

2 Q. So in your opinion --

3 A. So that --

4 Q. In your opinion, what effect did the
5 downstream recarbonation basin have on the
6 available head in the spiractors at the Hadnot
7 Point Water Treatment Plant?

8 MS. O'LEARY: Object to form.

9 THE WITNESS: Well, it
10 controls the head, but -- but, you know,
11 I measured the pipe and you have 2 feet
12 from the rim of the pipe to the top of
13 the pipe, and that's what I did on
14 February 11 and that's what I done the
15 previous visit on the pipe that was on
16 the truck. So I did measure those. I
17 did not do a visual evaluation.

18 BY MS. BAUGHMAN:

19 Q. You did not do a visual evaluation
20 of the head in the spiractor of Hadnot Point when
21 it was running at any time; right?

22 A. I did not do measurements when the
23 spiractor was running.

24 Q. Okay. Or -- and you didn't make a

1 visual -- have you -- have you actually seen the
2 head, the height of the water in the effluent pipe
3 or in the spiractor when it was running at any of
4 the treatment plants?

5 MS. O'LEARY: Object to form.

6 THE WITNESS: No, you cannot
7 see that because it is actually below
8 what you can see.

9 BY MS. BAUGHMAN:

10 Q. Okay. If you look at your -- what
11 we marked as Exhibit 11 to your prior deposition,
12 your notes, you just mentioned something that you
13 measured 2 feet.

14 A. Yeah. Well, I measured 18 inches
15 and then -- and then I relied on the AHE diagram,
16 and I agree with a pipe of this kind flowing would
17 have about 6 inches at the bottom and that's 18
18 plus 6 brings you to 24 for a head.

19 Q. Okay. Is the effect of the --
20 there's no recarbonation basin at Tarawa Terrace;
21 right? We already talked about that.

22 MS. O'LEARY: Object to form.

23 THE WITNESS: Yeah. Yes.

24 BY MS. BAUGHMAN:

1 Q. Okay. But you assumed the
2 same -- the same fall height at Tarawa Terrace and
3 at Hadnot Point; right?

4 A. I don't recall what I did for Tarawa
5 Terrace.

6 Q. Well, we just talked about it. I
7 mean, we can turn to your report. It's page 5-9.

8 A. (Reviews document.)

9 Q. Of Exhibit 31.

10 And you've assumed for Tarawa
11 Terrace the exact same fall height as you assumed
12 for Hadnot Point; right?

13 A. Yes, and I believe that's a
14 reasonable assumption because the type of
15 spiractors were the same.

16 Q. Right.

17 But there's no recarbonation basin
18 in Tarawa Terrace. There never was.

19 A. There is no -- there is no
20 recarbonation -- if I remember correctly, there is
21 no recarbonation at Tarawa Terrace.

22 Q. Right.

23 So you haven't made any accounting
24 for the fact there was a recarbonation basin at

1 Hadnot Point and not at Tarawa Terrace in your
2 calculation? You've assumed it's the same for
3 both?

4 A. As far as the fall height to the --
5 to the effluent pipe, yes.

6 Q. Okay. So the Hadnot Point spiractor
7 is under normal circumstances covered; right? All
8 of them. They have covers on them?

9 A. They have covers on them. I mean,
10 partially opened covers and that has not always
11 been the case since the start of the plant.
12 That's my understanding.

13 Q. Okay. So is it your testimony that
14 it's not possible to measure the fall height at
15 the Hadnot Point Water Treatment Plant while the
16 spiractor is operating?

17 A. Not under the conditions that I was
18 there.

19 Q. Okay.

20 A. You would -- you would need a major
21 project to do that.

22 Q. So you haven't done that?

23 A. I have not done that.

24 Q. Okay. If you look at AH

1 Environmental Figure 3-10, which, by the way, that
2 figure is also in your report; right? You
3 reproduced that AH figure in your report, didn't
4 you?

5 A. Yes.

6 Q. That in your report it's on page 5-4
7 of Exhibit 31. It's the exact same diagram;
8 right?

9 A. I believe so, yes.

10 Q. Okay. And I'll let you get there.
11 Okay.

12 So one thing I want to ask you is:
13 That diagram, it's Exhibit 2-2 in your report and
14 3-4 in the AH report, it seems to show like a 90
15 degree angle. It's showing like it goes down and
16 then it goes to the right, doesn't it?

17 The diagram appears to show the
18 spiractor has a 90 degree angle.

19 Would you agree?

20 MS. O'LEARY: Object to
21 foundation.

22 THE WITNESS: Yes, and that
23 was the basis of the AEH calculations --

24 BY MS. BAUGHMAN:

1 Q. Right.

2 A. -- to the schematic for that.

3 Q. But it's not the spiractor pipe.
4 You've observed it. You've taken pictures.

5 The spiractor pipe is not a 90
6 degree angle, is it?

7 MS. O'LEARY: Object to form.

8 THE WITNESS: No, it is more
9 like a J-shaped pipe.

10 BY MS. BAUGHMAN:

11 Q. Right.

12 And when we talk about fall height,
13 does that mean like -- that means the vertical
14 distance.

15 It's not -- it's not a diagonal
16 distance for the fall, right, for a weir?

17 MS. O'LEARY: Object to form.

18 THE WITNESS: Well, it is a
19 vertical distance on a weir, yes.

20 BY MS. BAUGHMAN:

21 Q. Right.

22 When we refer to fall height, we're
23 talking about the vertical fall, correct, top to
24 bottom?

1 A. Yes, that's -- that would be a fall
2 height for a weir, yes.

3 Q. Okay. And the calculation that both
4 you and AH used for the spiractor volatilization
5 is a calculation regarding a weir; right? It's
6 assuming that this acts as a weir?

7 A. Yes, that's what AEH did and I just
8 use the same approach.

9 Q. Okay. Can you turn to Exhibit 39
10 and just to be -- let's just establish first.

11 Exhibit 39. These are the photos
12 taken -- well, they're all marked February 11,
13 2025?

14 Do you see that? They all have that
15 marking on them with the date?

16 A. I see that.

17 Q. Okay. So these are from your visit
18 to the Camp Lejeune site on February 11, 2025.

19 That's what Exhibit 39 is; right?

20 MS. O'LEARY: Object to
21 foundation.

22 THE WITNESS: Not all
23 pictures have dates on it, but I think
24 you're correct. This is what I recall.

1 BY MS. BAUGHMAN:

2 Q. Okay. And if you could turn to page
3 28 of Exhibit 39.

4 What are we looking at there?

5 A. Hold on. Hold on.

6 Okay.

7 Q. What is -- what is this a picture of
8 HENNET_USA 28 in Exhibit 39?

9 A. This is a photograph taken from the
10 opening from the covers that is on top of the
11 spiractors that was not in use, that means it had
12 no water in it, and that is you have the spiractor
13 pipe as you can see the G -- the J-shaped pipe.
14 It's kind of laying down.

15 And then you have -- you have a
16 scale that was just basically put against the pipe
17 the best we could, and a picture was taken of
18 that.

19 Q. Okay. So Exhibit -- I'm sorry.

20 Page 28 of Exhibit 39, this is a
21 spiractor -- a pipe in the spiractor at Hadnot
22 Point Water Treatment Plant; right?

23 A. That's the pipe where I conducted
24 measurements, yes.

1 Q. Right.

2 Hadnot Point Water Treatment Plant;
3 right?

4 A. At Hadnot Point Water Treatment
5 Plant.

6 Q. Okay. On February 11, 2025; right?

7 A. Correct.

8 Q. Okay. And that what we see there,
9 that is a measuring tape trying to measure the --
10 the fall height; right?

11 A. No. The measuring tape is there to
12 kind of give the best you can a reliable scale
13 against the pipe.

14 Q. Okay. And from page 28 of Exhibit
15 39 we can see that this is the J-shape, as you
16 call it, pipe.

17 It is not a 90 degree angle;
18 correct?

19 A. It is a J-shaped pipe. Correct.

20 Q. Okay. And if we were talking about
21 what is the fall height, it would be from the top
22 of the rim of that pipe going straight down;
23 right? That's the fall height?

24 A. That would be the fall height for

1 the calculations or the fall height for the weir,
2 yes.

3 Q. Okay. And if you look at your
4 measuring tape, doesn't it look like the fall
5 height there is about 13 or 14 inches?

6 MS. O'LEARY: Object to form
7 and foundation.

8 THE WITNESS: No, that's a
9 visual effect because -- that's the best
10 we could do, but that's a visual effect
11 because you don't go -- the picture is
12 not -- provides a visual effect because
13 you don't have the tape all against the
14 pipe, and it is distorted. So.

15 BY MS. BAUGHMAN:

16 Q. How is it distorted?

17 A. The visual effect is distorted and,
18 you know, we measured that differently. You don't
19 only have -- this is only one picture that was
20 taken of that attempt there.

21 Q. Well, it looks like -- based on this
22 picture, it looks like that vertical distance is
23 13 inches, doesn't it?

24 MS. O'LEARY: Object to form

1 and foundation.

2 THE WITNESS: No. Whatever
3 you want the picture to say it looks
4 like, you have to understand that
5 it's -- it is basically distorted
6 photograph. It's not good enough for
7 measurement, and we did all the
8 measurements to kind of get at that.

9 BY MS. BAUGHMAN:

10 Q. Which picture in Exhibit 39
11 demonstrates the fall height that you measured?

12 MS. O'LEARY: Object to
13 foundation.

14 THE WITNESS: Well, I do
15 not -- I cannot answer that, but it seems
16 that you may not have all the pictures
17 that I took here. I don't know. I don't
18 know. I cannot verify that. It seems
19 that you cherry-picked one.

20 BY MS. BAUGHMAN:

21 Q. Dr. Hennet, I did not cherry-pick
22 anything. I have provided you with every -- a
23 picture of every photograph that was provided to
24 us from February 11, 2025. Okay? So don't accuse

1 me of that. Okay? This is everything that the
2 DOJ produced.

3 So can you show me which photograph
4 in Exhibit 20 -- 39 demonstrates, in your opinion,
5 the fall height?

6 MS. O'LEARY: Object to form
7 and foundation.

8 THE WITNESS: Yes, yes, and
9 give me a minute. Okay.

10 (Reviews document.)

11 Okay. I would go to a series
12 of pictures for this, and let's say you
13 have a Bates number that ends with 008.

14 That one is a measurement of
15 the -- of the diameter of the effluent
16 pipe. That's a measurement because that
17 one is not distorted because the tape is
18 touching one end of the pipe and coming
19 all the way to the -- to the other end,
20 and I think that that was something
21 like --

22 BY MS. BAUGHMAN:

23 Q. Okay. But 008 does not give us --

24 A. Okay.

1 Q. -- a measurement of the fall height,
2 does it?

3 MS. O'LEARY: Object to form.

4 THE WITNESS: I am going
5 there.

6 BY MS. BAUGHMAN:

7 Q. I am just asking you that question.

8 A. It doesn't. It doesn't.

9 Q. It does not?

10 A. No.

11 Q. Okay.

12 A. Okay. Now you have 009. Here you
13 have a distance that is measured from a bar, a
14 horizontal metal bar, using the rope to basically
15 get the distance from the top of the pipe to the
16 bar. So that's a distance that is relevant for
17 getting the fall height.

18 Q. Okay. So when we look at page -- at
19 page 9, how can we tell what that measurement is
20 from the picture?

21 A. Well, you have several steps in.
22 That -- that measurement with the rope is actually
23 taken with a tape outside of the -- of the opening
24 of the spiractor because you could not do it right

1 there.

2 Q. Okay. So there's no way by looking
3 at picture 9 on Exhibit 39 we could make that
4 measurement; correct? Not by looking at the
5 photo?

6 A. Hold on. Hold on.

7 Q. Just answer that question.

8 MS. O'LEARY: No. Object to
9 form.

10 BY MS. BAUGHMAN:

11 Q. No. I'm asking, Dr. Hennet, you
12 just brought up page 9.

13 Is there a way with the photo on
14 page 9 to make a measurement?

15 MS. O'LEARY: Object to form
16 and foundation.

17 THE WITNESS: The measurement
18 is done and illustrated in -- in
19 additional photographs where the lengths
20 of the rope is being measured with a
21 tape.

22 BY MS. BAUGHMAN:

23 Q. Okay. Show me where that is.

24 A. I am looking for it.

1 (Reviews document.)

2 Okay. That will be photograph 003.

3 Q. Okay. It's a measurement of a rope,
4 but we don't know, we can't tell from the
5 measurement where the rope was; right?

6 A. Well, I am telling you where the
7 rope was by showing you 009. That basically is
8 the way we had to do it.

9 Q. Okay. So you're saying that -- that
10 from that what we're seeing there is from that
11 pipe on 9 all the way to where? To what part of
12 the bottom of the spiractor?

13 A. Not to the --

14 Q. To --

15 A. It is to the top of the pipe of the
16 spiractor, just after it stops turning is a J.

17 MS. BAUGHMAN: "Just after it
18 stops turning is a J." So it's -- I tell
19 you what we'll do.

20 I'm going to mark as
21 Exhibit 41 a copy just of page 9.

22 (Document marked for
23 identification as Exhibit 41.)

24 BY MS. BAUGHMAN:

1 Q. And I'm going to give you a pen, and
2 I want you to show me from right on Exhibit 9
3 where the rope was that you measured. Just draw
4 the rope.

5 A. The rope is here. (Marks document).

6 Q. Okay. Can I see that, please?

7 A. (Hands document).

8 Q. So if you look at Exhibit 11.

9 A. Exhibit 11.

10 Q. In your diagram there, you're
11 showing 18 inches from where to where?

12 Don't write on this yet, on
13 Exhibit 41, but show me where that 18 inches would
14 be.

15 A. Well, it would be from the rim
16 elevation down. That would be this portion.
17 Because then we measure this distance on another
18 photographs, but we measured that distance from
19 there to the rim. And then you just subtract that
20 from the length of the rope, and then you have the
21 distance from the rim to the top of the pipe, and
22 that's 18 inches about. And I made a note that it
23 was difficult to measure. So it's --

24 Q. Okay.

1 A. It is an estimate --

2 Q. So.

3 A. -- plus or minus an inch or so.

4 Q. Okay. So use the pen here and go
5 ahead and, like, mark where the 18 inches is.
6 Write 18 inches so we can see what you're talking
7 about.

8 MS. O'LEARY: Object to form.

9 BY MS. BAUGHMAN:

10 Q. Go ahead. Go ahead.

11 A. Yeah. Again, you are just asking me
12 to do something. Just the accuracy of it you can
13 always talk about. But you have to -- you have
14 to go and -- it's -- we measured this distance
15 here. (Marks document).

16 Q. What -- but I'm looking at your --
17 your diagram --

18 A. And then --

19 Q. -- on Exhibit 11 and you're saying
20 18 inches based on this work. So I'm trying to
21 understand where that 18 inches is.

22 A. And I'm trying to explain that to
23 you.

24 Q. Okay. Can you show us?

1 A. Well, I can show you.

2 This is one measurement. Right?

3 Q. Okay. But you have to say --

4 A. That's the length of the rope.

5 Q. -- what "this" is. What --

6 A. That's -- that's what we --

7 Q. For the record, when you say "this

8 is one measurement," what are you referring to?

9 What's the number of that photo?

10 A. This is -- sorry, yes. It is 003.

11 Okay?

12 Q. Okay. All right.

13 A. This is one measurement that's total

14 length of that hole that you have here --

15 Q. Okay.

16 A. -- vertically.

17 Q. So that the line that you've drawn

18 on what we've marked as Exhibit 41 is the

19 measurement on page -- on the photo number 3;

20 right?

21 A. Yes.

22 Q. Okay. Now, where's the 18 inches

23 that you're -- you're indicating on Exhibit 11

24 exists? What -- what is that?

1 A. The next step is this one. It's
2 Exhibit 012.

3 Q. Okay. And that's showing 11 inches?

4 A. From the top of the bar, which is
5 always on top, to the rim.

6 Q. Right.

7 A. Right? So that would be this here.

8 Q. Right.

9 A. Right? And then on 003, you can see
10 that to the top of the bar, it's about 28 inches.
11 The lengths of the rope. Right?

12 Q. Right.

13 A. Then here you have this 11. Right?

14 Q. Right.

15 A. And -- and you have basically 28
16 minus 11, that's 17 but, you know, that
17 it's -- it's approximate. So this is -- this is
18 where the 18 comes from.

19 That this -- this is 012 that give
20 you the 11, 11 inches from the top of the bar to
21 the rim. Right?

22 Q. Uh-huh.

23 A. And then you have this that gives
24 you the entirety of the -- from the top of the bar

1 to basically the top of the pipe.

2 Q. Right.

3 A. And that's about 28 inches.

4 Q. Uh-huh.

5 A. So you subtract 11 from the 28
6 inches and that -- that gives you -- it will be
7 17, but I --

8 Q. Okay. Can you show me? Go ahead
9 and mark it on the diagram there, the 18 or 17
10 inches. Show us where that is.

11 MS. O'LEARY: Object to form.

12 THE WITNESS: It's difficult
13 on that.

14 You have the 11 here and you
15 have the 28 there.

16 BY MS. BAUGHMAN:

17 Q. Right.

18 But first on Exhibit 41, where is
19 the 18 inches?

20 A. Exhibit 41.

21 MS. O'LEARY: Objection.

22 BY MS. BAUGHMAN:

23 Q. This one.

24 A. On this photograph on 009?

1 Q. Right.

2 A. Well, it's going to be somewhere.
3 You have to subtract.

4 Q. Right.

5 Just mark it so that -- so that --
6 so that the court will understand what you're
7 saying.

8 MS. O'LEARY: Object to form.

9 He's just said it's hard to
10 see on that photo.

11 BY MS. BAUGHMAN:

12 Q. That's the photo you showed me that
13 was the best illustration of your measurements;
14 right?

15 MS. O'LEARY: Object to
16 foundation.

17 THE WITNESS: It's a
18 step-wise approach. You need more than
19 one thing to illustrate the -- the
20 measurements that I took.

21 You have this one which gives
22 you 28 inches. Right? This is this.

23 BY MS. BAUGHMAN:

24 Q. I understand.

1 A. You have this one. By "this one" I
2 meant 003.

3 And then you have 012 that give you
4 11 inches.

5 And then you have this one that
6 shows you that these lengths minus -- the lengths
7 that is on 003 minus the lengths that is on 012 --

8 Q. Okay.

9 A. -- gives you basically the distance
10 between the rim and the top of the pipe.

11 Q. Okay. So just -- so draw --

12 A. The top of the pipe.

13 Q. Mark the distance from the rim to
14 the top of the pipe on there.

15 MS. O'LEARY: Object to form.

16 THE WITNESS: I don't know
17 how to do that.

18 MS. BAUGHMAN: Are you
19 instructing him not to do it?

20 MS. O'LEARY: No. I'm
21 objecting to the form. He doesn't have
22 to do it, but I'm not instructing him not
23 to.

24 BY MS. BAUGHMAN:

1 Q. Okay. Go ahead.

2 A. Right. It is difficult to do here
3 because if I do something on this, you are going
4 to make something of it that I didn't mean it to
5 be and that's --

6 Q. Do this for me.

7 Where is the fall? If you were
8 measuring the fall height, if you could measure
9 the fall height; right?

10 A. Okay.

11 Q. Without this experiment. What is
12 the fall height?

13 A. Yeah, yeah.

14 Q. From where to where on that
15 document?

16 A. Not at the fall height yet. We are
17 at the distance between the rim and the top of the
18 pipe.

19 Q. Okay. I'm asking you a different
20 question now.

21 Where is the fall height?

22 A. The fall height would be to where
23 the level would be in this 12-inch pipe or in this
24 pipe as estimated by AHE -- AEH, and that's about

1 6 inches of here. So that would be something
2 from -- again, on this photograph, it's difficult
3 to do because you have a -- you have a visual
4 this.

5 Q. Let me ask you.

6 Wouldn't the fall height -- and I
7 understand people can't see what I'm doing. I'm
8 just.

9 Wouldn't the fall height be from
10 this rim to where the water level is? Isn't that
11 the fall height, or not?

12 MS. O'LEARY: Object to form.

13 THE WITNESS: That would be
14 from -- from this -- this rim to
15 basically, yeah, something like this.

16 BY MS. BAUGHMAN:

17 Q. Okay. So can you draw for me if you
18 are able to, whether you measured it or not, what
19 the fall height is so we understand what that is?

20 MS. O'LEARY: Object to form.

21 THE WITNESS: I gave you that
22 on my notes, and I'm telling you that the
23 basis for that is this here.

24 Drawing on photographs that

1 are distorted like this is not something
2 that's scientific.

3 BY MS. BAUGHMAN:

4 Q. Well, these are -- those are photos
5 that you took; right? Or you directed to be taken
6 at your site visit?

7 A. Those are photographs and the
8 measurements are on 003, 012, and then you have
9 the 6-inch water level from AEH in the pipe. And
10 the dimension of the pipe is basically 12-inch
11 approximately.

12 Q. Okay. So are you refusing to draw
13 the fall height on Exhibit 41, your picture marked
14 number 9? You won't do it?

15 MS. O'LEARY: Object to form.

16 THE WITNESS: It's described
17 in my report and the fall height, the
18 fall height is from the rim to the water
19 level in the pipe when it's operating.

20 BY MS. BAUGHMAN:

21 Q. Okay. But you don't want to draw
22 it?

23 MS. O'LEARY: Object to form.

24 THE WITNESS: I don't feel

1 comfortable to draw it on a picture that
2 is distortion.

3 BY MS. BAUGHMAN:

4 Q. Okay. And why and what -- why is
5 Exhibit 9 distorted? What's distorted about it?

6 A. Because it is a photograph of
7 something that is actively that is one dimensions
8 and the photograph itself is, you know, one
9 dimension things with distortions. That's what
10 happens. That's why you can -- it is very
11 difficult to do visual evaluation if you don't do
12 measurements because the distortion just leads you
13 to -- to estimates that are not correct.

14 Q. And how do you know -- when you
15 did -- when you dropped the rope down, how do you
16 know that the rope was straight? Could you see
17 the rope?

18 A. Yes, I did see the rope --

19 Q. Okay.

20 A. -- and it was straight.

21 Q. Do you have a picture of the rope
22 hanging down when you made the measurement?

23 MS. O'LEARY: Object to
24 foundation.

1 THE WITNESS: It is on 003.

2 BY MS. BAUGHMAN:

3 Q. No, no, no.

4 I mean, when you dropped the rope
5 down, right, to figure out the length there, do
6 you have a picture of you when you did that?

7 MS. O'LEARY: What's the
8 exhibit number you're pointing to?

9 MS. BAUGHMAN: Number 1.

10 THE WITNESS: Right. It is on
11 009.

12 BY MS. BAUGHMAN:

13 Q. The rope? No, you drew the rope on
14 009.

15 A. No. This is on 009. This one is a
16 different one. You go to Exhibit 40 and this is
17 009 on Exhibit 40. There I did not draw anything
18 on 009 in Exhibit 40. You made me draw something
19 on Exhibit 41.

20 Q. Hold on a minute.

21 A. And what you can see there is a
22 rope.

23 Q. But those are the same picture.

24 A. They are the same pictures, but

1 there you made me draw on it.

2 Q. Okay. Did you just draw on top of
3 what the rope -- of where the rope was?

4 A. That's what you asked me to do.

5 Q. Okay. All right. Okay.

6 And is there any kind of a --
7 there's no measurement or scale on HENNET_USA 9
8 that would allow us to measure that rope distance;
9 correct? Independent of what you-all did?

10 A. You don't have -- I couldn't put a
11 scale on there. Otherwise, I would have done it.

12 Q. Okay. Okay. And other than the
13 diagram that's drawn on Figure 3-4 of AH, do you
14 have any other basis to disagree with the
15 statement in the AH report that the effluent pipe
16 is likely to be flowing full in the Hadnot Point
17 Water Treatment Plant spiractors?

18 MS. O'LEARY: Object to
19 foundation.

20 THE WITNESS: In the AEH's
21 report, somewhere in there, it just says
22 that I made calculations for the
23 condition of the pipe using a dimension
24 of 12 inches for the pipe, and at the

1 flow rate that comes out of the
2 spiractors, I estimated that the depths
3 of water in the pipe is 6 inches.

4 BY MS. BAUGHMAN:

5 Q. And where is that calculation in
6 your report?

7 Is that in your report?

8 A. I -- I just -- I just used the AEH
9 diagrams that I put in my report and it is there.

10 Q. I know.

11 Is that calculation in your report?

12 A. The calculation for -- for what?

13 Q. For -- for -- you just said you did
14 a calculation to see whether the level of water in
15 the pipe would be 6 inches based on the -- the
16 amount of water going through the spiractor or
17 through the water treatment plant.

18 I was just wondering: Is that
19 calculation in your report?

20 A. I didn't do that calculation.

21 MS. O'LEARY: Object to form.

22 THE WITNESS: The EA -- AEH
23 did that calculations, and it is a
24 reasonable answer.

1 BY MS. BAUGHMAN:

2 Q. I want to ask you something else
3 about the AH report while we're here.

4 If you could turn to pages 3 -- page
5 3-8 first of the AH report, Exhibit 38.

6 A. Yes.

7 Q. And there is a picture of the Hadnot
8 Point Water Treatment Plant spiractor effluent
9 pipe and it's labeled "1941/1942."

10 Do you have any reason to believe
11 that the date of that photograph is not correct?

12 MS. O'LEARY: Object to
13 foundation.

14 THE WITNESS: I have no
15 understanding of the source of the
16 photographs and it's not described. So
17 this is -- this is -- this is what it is.

18 BY MS. BAUGHMAN:

19 Q. Right.

20 But do you have some reason to
21 believe that the date is incorrect as stated by AH
22 in its report?

23 MS. O'LEARY: Object to form.

24 THE WITNESS: With the

1 exceptions is I don't see where it comes
2 from. So whether it is even -- I have
3 no -- I have no information that
4 would -- that would basically tell you
5 where that picture actually comes.

6 BY MS. BAUGHMAN:

7 Q. Right.

8 A. Except what is written under it.

9 Q. Right.

10 A. And that's what it is.

11 Q. Okay. So the next page, on page 3-9
12 they have a spiractor effluent pipe for Hadnot
13 Point labeled "1944/1945."

14 Do you have a basis to believe that
15 that date is incorrect?

16 MS. O'LEARY: Object to form.

17 THE WITNESS: Same thing. I
18 have no way to verify if this is from
19 there and if it is from that date.

20 I -- I don't know but you see --

21 BY MS. BAUGHMAN:

22 Q. But do you have -- what I'm asking
23 is: Do you have information that leads you to
24 believe that's the wrong date?

1 A. I have no information to verify
2 this. None.

3 Q. Either way?

4 A. Either way.

5 Q. Okay.

6 Okay. Okay. I want to ask you some
7 questions about the water buffalos. And while
8 we're -- while we've got Exhibit 39 handy, the
9 pictures from February 11th, let me ask you a few
10 questions about those photos.

11 If you turn to page 89, what is that
12 a picture of?

13 A. This is a photograph of a station
14 basically where water buffalos can be filled up at
15 the base.

16 Q. Okay. And are they filled up
17 through that red hose?

18 A. Yes.

19 Q. Okay. Is there any reason that when
20 the water buffalos are filled up, the Marines
21 can't just put the hose right into the tank
22 instead of holding it above the tank?

23 A. Well, they have to hold it because
24 with the pressure that goes through that pipe, it

1 will just leave the water.

2 Q. I see.

3 But is there any reason they can't
4 put it inside the water buffalo to fill it up
5 instead of holding it above the water buffalo?

6 A. Well, when I observed it, I did it,
7 the way I did it is, I kept the hose on top of
8 the --

9 Q. Right.

10 A. -- on top of the water.

11 Q. So your observation was in February
12 of 2025; correct?

13 A. That's my observation, yes.

14 Q. Did you have any conversations with
15 any Marines about what the normal protocol is to
16 fill a water buffalo?

17 A. They told me that. So I did it. I
18 didn't instruct them to do it in any way.

19 Q. So you did have a conversation with
20 the Marine?

21 A. No, no. I did not have a
22 conversation with the Marine themselves. I just
23 came up with the water buffalo, and I just climbed
24 on it to be able to take pictures. And then they

1 they say -- I just told them, fill it up.

2 Q. Okay.

3 A. I mean, do it and that's it.

4 Q. So that's --

5 A. That's all. That's all my
6 conversation with them. That's it.

7 Q. Got it. Okay.

8 Have you had any conversation with
9 any other individual regarding how water buffalos
10 were filled up at Camp Lejeune?

11 A. I have not had conversation about
12 that because -- but there is information that in
13 the historian report that shows how it should be
14 done and so on.

15 Q. Okay.

16 A. And how it was done over time.

17 Q. Okay. You're referring to the DOJ's
18 expert's -- historian expert's report; correct?

19 A. Yes.

20 Q. Okay. Have you yourself done any
21 investigation, independent of the historian, on
22 how water buffalos were filled up at Camp Lejeune,
23 other than watching this one be filled up in 2025?

24 A. Well, yes, I looked for information

1 that describes, you know, the geometry of the
2 water buffalos, what -- what they weigh. And I
3 found what I found, and based on that, I just -- I
4 just understood that for the water buffalos that I
5 found information on the dimensions of, they were
6 filled up through the filling hole by connecting
7 the hose to the filling hole that there's a
8 strainer to it.

9 That's -- that's what I recall. I
10 think it is in my report the diagram of the water
11 buffalos, and that's what I relied upon to say
12 this is the way a water buffalos was filled up.

13 Q. Okay. So other than looking at the
14 dimensions of water buffalos, did you do anything
15 else to investigate how water buffalos were filled
16 at Camp Lejeune?

17 Let me strike that and start over.

18 Other than watching one water
19 buffalo be filled up in 2025 and reviewing the
20 dimensions of water buffalos, did you do anything
21 else to investigate how water buffalos are filled
22 up?

23 MS. O'LEARY: Objection and
24 foundation.

1 BY MS. BAUGHMAN:

2 Q. Your investigation, not the
3 historian.

4 MS. O'LEARY: Object to form
5 and foundation.

6 THE WITNESS: I relied on
7 the -- I borrowed the information that
8 the historian had put together, which is
9 more than what I had found on water
10 buffalos and, you know, the protocol of
11 filling it and so on over time.

12 BY MS. BAUGHMAN:

13 Q. Okay. I'm just trying to get the
14 universe of what you're relying for how water
15 buffalos were filled up.

16 So we know you're relying on the
17 historian's report, the DOJ's historian.

18 A. Uh-huh.

19 Q. We know you're relying on watching
20 one water buffalo be filled up in February 2025.
21 And we know you're relying on the dimensions of
22 the water buffalo.

23 Is there anything else you're
24 relying on?

1 MS. O'LEARY: Object to
2 foundation.

3 BY MS. BAUGHMAN:

4 Q. For how water buffalos were filled
5 up at Camp Lejeune?

6 MS. O'LEARY: Same objection.

7 THE WITNESS: Well, you know,
8 that I mention and so are in my report.
9 Right? I -- in an appendix of my report,
10 you have water buffalos with the
11 dimensions marked on them.

12 BY MS. BAUGHMAN:

13 Q. We -- that's one of the three things
14 I mentioned.

15 Is there anything else?

16 A. Well, I have also, you know, I have
17 seen all of a sudden after my report two
18 affidavits by people who apparently witnessed
19 water buffalos being filled.

20 Q. Okay. There's that.

21 Anything else?

22 A. And that was new to me.

23 Q. I understand.

24 A. That was major reason why I went

1 back to kind of look at that.

2 Q. Right.

3 Anything else?

4 A. That's all I can think about right
5 now.

6 Q. Okay. So do you have any
7 information that leads you to believe that when
8 Marines filled up water buffalos at Camp Lejeune,
9 they did not put the hose inside the water buffalo
10 to fill it up?

11 MS. O'LEARY: Object to
12 foundation.

13 THE WITNESS: I have seen
14 descriptions that you would hook up the
15 hose to the filling hole, the filling
16 port that is a strainer. I have seen
17 that.

18 And then I have seen the
19 information that some water buffalos were
20 filled up through the manhole, and that
21 came with those affidavits that came
22 after my report on that.

23 And also in Dr. Sabitini's
24 rebuttal report to my report, it says the

1 water buffalos sometimes are filled up
2 through the manhole, and that was the
3 reason why I just wanted to see how do I
4 do it today, and that's what I did.

5 BY MS. BAUGHMAN:

6 Q. I'm going to respectfully object as
7 nonresponsive, and maybe you don't understand my
8 question. So I'm going to try it again.

9 When you -- okay. Let me just ask
10 you. Let me back up.

11 You watched one water buffalo be
12 filled up in February 2025; right?

13 A. That's right.

14 Q. Okay. Before that, had you yourself
15 ever seen a water buffalo be filled up?

16 A. Not before that.

17 Q. Okay.

18 A. Hold on. Except on a video that
19 Dr. Sabatini put in his report.

20 Q. Okay. So when you wrote your report
21 in December of 2024, you had never seen a water
22 buffalo be filled up; correct?

23 A. No. The only information I had is
24 what I have in my report and information in the

1 historian report.

2 Q. Right.

3 So that means when you signed your
4 report on December 9, 2024, you had never seen a
5 water buffalo be filled up; correct?

6 A. Personally, I have never seen.

7 Q. Okay.

8 A. I had never seen a water buffalo
9 being filled up --

10 Q. Okay.

11 A. -- by then.

12 Q. So it's possible to fill a water
13 buffalo by taking that red hose and putting it
14 inside the tank to fill it up; right?

15 A. Everything is possible.

16 Q. Okay. What's your basis to say that
17 was never done?

18 MS. O'LEARY: Object to
19 foundation.

20 THE WITNESS: Maybe it was
21 done, maybe it was not, but it was also
22 done through the -- through the port, the
23 filling port. That's documented, and it
24 was also done as I observed it.

1 And it was also done as
2 Dr. Sabatini attachment to his report,
3 which is a YouTube video of the filling
4 up of a water buffalo. That's -- and in
5 that case, I did it basically the same
6 ways I observed.

7 BY MS. BAUGHMAN:

8 Q. All right. So you have not done any
9 calculations regarding the amount of
10 volatilization that occurs during the filling of a
11 water buffalo through a manhole cover; right?

12 A. No. I have observed it and I have
13 seen the extensive aeration that occurs, and I
14 have basically concluded that it's quite similar
15 as far as losses are concerned than the calculated
16 losses that I have in my report --

17 Q. Okay.

18 A. -- that where the water buffalo was
19 filled up through a strainer.

20 Q. I'll object as nonresponsive.

21 I just want to know: Have you done
22 a calculation? Have you done a calculation on the
23 amount of volatilization that occurs when you fill
24 a water buffalo through a manhole cover?

1 A. I have not done --

2 MS. O'LEARY: Object to form.

3 THE WITNESS: Sorry.

4 I have not done additional
5 calculations to from what is in my report
6 because I consider that it was similar.

7 BY MS. BAUGHMAN:

8 Q. Okay. And in your report, you don't
9 have a calculation on the volatile -- the amount
10 of volatilization from filling a water buffalo
11 through the manhole cover; right?

12 A. I have it through calculations
13 through a strainer in my report.

14 Q. Not through the manhole cover?

15 A. Not through the manhole cover.

16 Q. Okay.

17 A. And then what I observed led me to
18 conclude that it was pretty similar.

19 Q. Okay. I'll object as nonresponsive
20 to everything after "not through the manhole
21 cover."

22 When you observed that one water
23 buffalo being filled in February 2025, did you
24 make any measurements related to volatilization?

1 A. I didn't do measurements, but I did
2 observations.

3 Q. Okay. And this may be obvious, but
4 I just -- I just want to ask you.

5 So when we're talking about the
6 contaminants that -- that were in the water at
7 Camp Lejeune -- PCE, TCE, the other VOCs -- if
8 they're volatilizing out of the water, right, you
9 couldn't see them; right?

10 A. I couldn't see them, but I could
11 smell the chlorine, which is also volatile organic
12 compound. And when you do that, I could smell the
13 chlorine coming out.

14 Q. Okay. And you can't see the
15 chlorine either; right?

16 A. You cannot see it but --

17 Q. Okay.

18 A. -- I could -- I could smell it, and
19 then that's why you go to geochemistry to estimate
20 the partitioning.

21 Q. Okay. So did you do a calculation
22 on how much VOCs would come out of the water when
23 you fill a water buffalo based on chlorine
24 smelling?

1 A. Not based on that. That's an
2 observation.

3 Q. Okay.

4 A. I didn't do a calculation on it.

5 Q. Okay.

6 A. It's an observation.

7 Q. Did you make any measurement on how
8 much chlorine was coming out of the water when the
9 water buffalo was being filled?

10 A. I did not measure that. I didn't
11 have the -- what would have been needed to do
12 that, no.

13 Q. Okay.

14 A. And also I would like to take a
15 break at some point.

16 MS. BAUGHMAN: We can take a
17 break right now. That's fine. Okay?
18 Going off the record.

19 THE VIDEOGRAPHER: Time is
20 11:31 AM. We're now off the record.
21 (A recess was taken.)

22 THE VIDEOGRAPHER: The time is
23 11:42 AM. We are now on the record.

24 BY MS. BAUGHMAN:

1 Q. All right. Dr. Hennet, I want to
2 ask you a few more questions about Exhibit 40,
3 which are the pictures from a prior visit of yours
4 before 2025 to the Camp Lejeune.

5 Have you got that in front of you?

6 A. Yes, I do.

7 Q. Okay. Can you tell me -- the one
8 that's page 3, we're looking at CLJA PHOTOS SSPA
9 number 3.

10 What's that a picture of?

11 A. This is a picture of the top of --
12 the best I can recall -- the top of a spiractor.

13 Q. Do you know at which plant?

14 A. I think this one would have been
15 Hadnot Point.

16 Q. Okay. And can you -- is it possible
17 to measure the fall height based on this picture?

18 A. You cannot access it, no.

19 Q. Okay.

20 A. You cannot see it either.

21 Q. It looks like -- from the picture,
22 it looks like the water is full all the way to the
23 top.

24 Is that true?

1 MS. O'LEARY: Object to
2 foundation.

3 THE WITNESS: No, I don't
4 think so.

5 BY MS. BAUGHMAN:

6 Q. Okay. If you turn to page 7 of
7 Exhibit 40, what's that a picture of?

8 A. That's a picture of a water buffalo.

9 Q. And we're talking a little bit
10 earlier about how in your report, your December
11 2024 report we've marked as Exhibit 31, you did
12 calculations assuming there was a filler pipe with
13 a strainer, right, and that's how it was filled
14 through that filler pipe with a strainer; right?

15 A. That's correct.

16 Q. Okay. Is there a flow pipe with a
17 strainer on the water buffalo picture in page --
18 on page 7 of Exhibit 40?

19 A. Not -- not on this one.

20 Q. Okay. So you -- you observed some
21 water buffalos, even if you didn't see them
22 filled, in your prior visit to Camp Lejeune,
23 correct, before 2025?

24 A. Yes, parked.

1 Q. Did you look for the -- the filler
2 pipe with the strainer while you were there?

3 A. This one didn't have one. So.

4 Q. Okay. So you knew that some water
5 buffalos didn't have that?

6 A. In 2024 I knew that, yes.

7 Q. Okay. Did you do an investigation
8 to see during what years the water buffalos had a
9 filler pipe with a strainer?

10 A. Outside of what I mentioned before,
11 you know, which is the historian report as well as
12 the schematics of water buffalos historically, I
13 have nothing else.

14 Q. Okay.

15 A. But in '24 this one that I saw had
16 no -- no filler pipe.

17 Q. Okay. If you look at page 12,
18 that's the picture of a spiractor that was sitting
19 on a truck bed; is that right?

20 A. Yes.

21 Q. And that was found near the Holcomb
22 Boulevard Water Treatment Plant?

23 A. I think it was either on a truck bed
24 parked next to the Holcomb Boulevard.

1 Q. Okay.

2 A. I believe so, yeah.

3 Q. All right. So if you turn to
4 picture 20 of Exhibit 40, is that another picture
5 of a water buffalo?

6 A. That's correct.

7 Q. And, again, there's no filler pipe
8 with a strainer on this one?

9 A. Yeah, again 2024, water buffalo.

10 Q. Okay.

11 A. I took a picture of it.

12 Q. Okay.

13 A. I mean, I had a picture of it taken.

14 Q. Then if you turn to page 25, is that
15 a -- is that that -- the same spiractor that was
16 sitting on the truck bed near the Holcomb
17 Boulevard Water Treatment Plant?

18 A. Yes.

19 Q. Okay. And you used your -- your
20 card there, your Metro card as a scale?

21 A. That's not mine but...

22 Q. That's what was used for the
23 scaling?

24 A. That's what was used for the

1 scaling, yes.

2 Q. All right. So again we turn to page
3 39. It's another picture of a water buffalo;
4 right?

5 A. It's a picture of a water buffalo.
6 I don't know if it's the same one or not. I don't
7 know but --

8 Q. Okay.

9 A. -- it is, yes.

10 Q. Again, there's no filler pipe with a
11 strainer on that one; right?

12 A. No. That's again 2024. This is
13 what I saw.

14 Q. Okay. And then picture 42. This is
15 similar to a picture we saw from your 2025 visit.

16 This is where the Marines would fill
17 up the water buffalos?

18 A. Yes.

19 Q. Okay. All right. When you were
20 writing your report, your December 2024 report,
21 did you review the technical manuals that came
22 with the water buffalos that explained how the
23 water buffalos should be filled up?

24 MS. O'LEARY: Object to

1 foundation.

2 THE WITNESS: I don't
3 recollect that. You have to show me
4 that.

5 BY MS. BAUGHMAN:

6 Q. Were you aware when you wrote your
7 report in December 2024 that some water buffalos
8 during the time frame of the 1950s through 1986,
9 in fact, did not come with the filler pipe with a
10 strainer? Did you know that?

11 A. I didn't know that then.

12 Q. Okay.

13 A. With the exception of what was in
14 the historian report, and I don't recollect the
15 details of that.

16 Q. Okay. I want to ask you some. If
17 we could turn to your report, Exhibit 31. And
18 turn to a different subject here. If we could
19 turn to page 5-29.

20 Are you there? Okay.

21 So you've opined that there was a
22 what you call a long-time average TCE
23 concentration of 227 micrograms per liter for
24 water supplied by the Hadnot Point Water Treatment

1 Plant; right?

2 A. You have to show me where I say
3 that.

4 Q. Sure.

5 The first paragraph under your
6 exhibit on page 5-29. Look at that last sentence.
7 You say:

8 "Considering that Hadnot Point or
9 HP-651 was being pumped 39% of the time yields a
10 TCE long-time average concentration of 227
11 micrograms per liter for Hadnot Point Water
12 Treatment Plant supplied water."

13 Do you see that?

14 A. Yes, I do.

15 Q. Okay. And this -- so -- so your
16 calculation of 227 micrograms per liter for the
17 long-time average is based on the 39 percent,
18 right? The Hadnot Point water 651 was being
19 pumped 39 percent of the time; correct?

20 A. Yes.

21 Q. And also based on your calculation
22 of an average concentration for TCE in Hadnot
23 Point Water Treatment Plant from January 21, 1985
24 to February 5, 1985 of 582 micrograms per liter;

1 right?

2 A. Yes.

3 Q. Okay. And in case you didn't -- you
4 seem hesitant. Look at the first sentence of that
5 paragraph. You wrote:

6 "The average concentration measured
7 for TCE at Hadnot Point Water Treatment Plant over
8 the period January 21 through February 5, 1985, is
9 582 micrograms per liter."

10 Do you see that?

11 A. Yes, I do.

12 Q. So to get to the 227 for the
13 long-time average, you had two inputs to that
14 calculation, the 39 percent and the 582; right?

15 A. Yes.

16 Q. Okay. So I want to ask you first
17 about the calculation of the average concentration
18 for TCE at the Hadnot Point Water Treatment Plant
19 of 582. Okay? I want to talk about how you
20 reached that number. Okay?

21 So first let's -- let's look at page
22 5-23 of your report.

23 A. Yes.

24 Q. Okay. And in the paragraph at the

1 top of the page in the middle, you refer to these
2 18 water samples; right? You see that in the
3 middle of that paragraph you say:

4 "Eighteen water samples were
5 collected from locations in the two distribution
6 systems."

7 Okay? And that's referring to this
8 time frame when the Hadnot Point Water Treatment
9 Plant was supplying water to Holcomb Boulevard;
10 correct? That --

11 A. Yes.

12 Q. -- January 27 to February 5, '85
13 time frame; right?

14 A. I think that's correct.

15 Q. Okay. Look at the sentence right
16 before:

17 "During that period of time" --
18 right, referring to January 27 to February 5,
19 '85 -- "HP-WTP, the Hadnot Point Water Treatment
20 Plant, supplied the entirety of the water in the
21 Holcomb Boulevard system which was shut down
22 following a fuel release incident."

23 Do you see that?

24 A. Yes.

1 Q. So during that time frame, these 18
2 water samples were collected from the two
3 distribution systems, and then you say:

4 "The average TCE concentration in
5 the treated water was 582."

6 Right?

7 A. Yes, that's what I say.

8 Q. Okay. So look at -- let's look at
9 page 5-24 of your -- hold on.

10 We look at page 5-27 of your report,
11 which you've labeled as Exhibit 5-3.

12 You see the title of that Exhibit
13 5-3 is "COC Concentrations in the Holcomb
14 Boulevard and Hadnot Point Systems During Shutdown
15 of Holcomb Boulevard Water Treatment Plant:
16 January 27 to February 5."

17 And you say the water -- okay.

18 So these are the 18 numbers that you
19 used to calculate the average; correct?

20 A. Well, it's probably correct. I
21 don't know.

22 Q. Well, I have questions about it. So
23 I want to make sure we're on the same page.

24 You did the calculations; right?

1 A. Yeah.

2 Q. Okay. Okay. So if you go back to
3 page 5-23 in your report?

4 A. Yes.

5 Q. In the last sentence says -- okay.
6 So the 582 let's go back to that.

7 "Eighteen water samples were
8 collected from locations in two distribution
9 systems. The average TCE concentration of treated
10 water was 582 micrograms per liter."

11 Do you see that statement? Are with
12 me?

13 A. I see the statement, yes.

14 Q. And then the last sentence, or you
15 go on to say:

16 "The data for the period January 27
17 to February 5, 1985 that contains the data for the
18 period when the Hadnot Point Water Treatment Plant
19 was providing 100% of the Holcomb Boulevard water
20 supply are summarized in Exhibit 5-3."

21 Right?

22 A. That's what it says, yes.

23 Q. Okay. So the data to calculate this
24 average of 582 micrograms per liter are in

1 Exhibit 5-3; correct?

2 A. Well, you know, I have to
3 refresh -- to double-check that, but I think it
4 appears to be correct.

5 Q. That's what the report --

6 A. Yeah.

7 Q. -- says; right?

8 A. (Reviews document.)

9 Yes, I think that's correct.

10 Q. Okay. So I want to ask you about
11 that, this data that were used to calculate the --
12 the 582 microgram per liter average TCE
13 concentration. All right?

14 Exhibit 5-3 shows the location where
15 those samples were taken; correct?

16 A. Yes.

17 Q. Okay. So just for reference,
18 building number 20 is the Hadnot Point Water
19 Treatment Plant; right?

20 A. Yes.

21 Q. Okay. And so the last entry on page
22 527 for building number 20, that sample date was
23 February 5, 1985.

24 Do you see that?

1 A. Yes.

2 Q. Okay. And the value for TCE was
3 429; right?

4 A. Yes.

5 Q. Okay. But that sample was taken the
6 day after HP-651 had been shut down; correct?

7 A. Same day or the day after. I don't
8 know.

9 Q. Well, look at the heading of your
10 Exhibit 5-3 on this page. Right in the heading of
11 your Exhibit 5-3 it says --

12 A. Yes.

13 Q. -- "Supply Well HP-651 Was Shut Down
14 on February 4, 1985"; correct?

15 A. Yes.

16 Q. Okay. So this sample of 429 for
17 building 20 was taken a day after HP-651 was shut
18 down; correct?

19 A. Yes, and -- yes, and it represent
20 treated water that is in the reservoirs. Yeah.

21 Q. Right.

22 But the whole point of doing this
23 calculation is to figure out what the
24 concentrations were when HP-651 was running;

1 right? Was being pumped?

2 A. Yeah. Well, it was, the calculation
3 is what was the water that was delivered on
4 average, what was the concentration on average in
5 the water that was delivered in -- in both areas
6 until February 5. That's what I recall.

7 Q. Well, let's go back to page 5-23.

8 A. Here we go.

9 Q. The first sentence on page 5-23 of
10 your report says:

11 "There is available data for COC
12 concentrations in treated water from Hadnot Point
13 Water Treatment Plant over the period January 27
14 to February 5, when it is known that supply well
15 HP-651 was being pumped."

16 Okay. Is it the whole point of this
17 calculation of you're trying to figure out the
18 average TCE concentration in the water while
19 HP-651 was being pumped; right?

20 A. No. Actually, this is when the --
21 when the water that was supplied to both system
22 was coming from Hadnot Point Water Treatment
23 Plant.

24 Q. But the purpose of your calculation

1 is to figure out what -- how much -- how much TCE
2 was in the water when HP-651 was being pumped?

3 A. Yes, and HP 51 -- 651 was being
4 pumped and said it was shut down on February 4th,
5 but then, you know, it takes -- what you have in
6 the reservoirs that is being provided to the rest
7 of the system, it takes -- it takes a while to
8 flush that through.

9 Q. Okay. Well, if we look at the
10 number for building number 20 on January 31st,
11 right, which is two -- two lines up, we know on
12 January 31st HP-651 was, in fact, being used;
13 right?

14 A. 651? Was being pumped, yes.

15 Q. Yes. Okay.

16 And so when on January 31st the
17 number was 900 micrograms per liter; right?

18 A. Yes.

19 Q. So it's almost -- it's more than
20 double than the number the day after HP-651 had
21 been turned off; correct?

22 A. Yes, and you have a variability.
23 You have some variation in the concentrations.

24 Q. Is there an explanation for that

1 variation the fact that HP-651 had been turned off
2 the day before?

3 A. Well, it would have some effect, but
4 you also have -- I have to go back to this to --
5 to go into details of where you want to go. You
6 know, you also have dates 1/29/85 that were lower
7 and -- well, you have a variability. Right? It's
8 not one number. And I estimated a number that is
9 representative --

10 Q. Okay.

11 A. -- for the long-term things and I
12 did it the way I explain I did it, and that's what
13 it is.

14 Q. Let me ask you this.

15 Would you agree that the February 5,
16 1985 sample from building 20 does not represent
17 the concentration of TCE in the water being pumped
18 from Hadnot Point while HP-651 is pumping?

19 A. Well, but it contains water that was
20 pumped at HP-651 and that's what's contaminated.

21 Q. And it contains -- it also contains
22 water when HP-651 was not being pumped; right?

23 A. Well, that depends how flush the
24 system was. You have to look at the timing by the

1 hour and, you know, I don't recall the detail of
2 that. But it is. You have the effect of 651. No
3 question about it and --

4 Q. There's also no question that there
5 would have been water in that sample, that 4/29
6 sample on February 5th, that was from wells other
7 than HP-651 because HP-651 was not being pumped on
8 February 5th; right?

9 MS. O'LEARY: Object to
10 foundation.

11 THE WITNESS: Yes, and, again,
12 I will have to go to the hour. When was
13 it stopped exactly and when -- how much
14 time it takes to flush the system, and --
15 and I see what you -- what you are
16 getting at.

17 It says you have slightly less
18 concentration then, therefore, might have
19 to be a little bit higher. It would not
20 change it by much at all.

21 BY MS. BAUGHMAN:

22 Q. Okay. Let me ask you some more
23 questions about this then.

24 Building 670. I think we talked

1 about this earlier. Building 670 is the Holcomb
2 Boulevard Water Treatment Plant; right?

3 A. Yes, and that's the reservoirs in
4 that -- in that system, yes.

5 Q. Okay. So there are five samples
6 included in your calculation on Exhibit 5-3 that
7 were from building 670.

8 Do you see that?

9 A. Yes.

10 Q. Okay. And the numbers of TCE at
11 building 670, the Holcomb Boulevard Water
12 Treatment Plant, the measurements for TCE were
13 8.2, 340, 27, 24, and 26; right?

14 A. Let me just get to find it.

15 Where did you get the 842?

16 Oh, yeah. Yes.

17 Q. Okay. And two of those samples were
18 taken on January 29th and three of them were taken
19 on January 31, 1985; right?

20 A. Yes.

21 Q. Okay. And I averaged those five
22 and, you know, I could -- you could use a
23 calculator on your phone or whatever, but probably
24 sounds right.

1 If you have the 8.2, 340, 27, 24,
2 26, the average of that is 85 micrograms per
3 liter. Okay? Take my word for that.

4 Let me ask you this question.

5 Do you believe 85 micrograms per
6 liter is representative of the amount of TCE in
7 Hadnot Point Water Treatment Plant water when 651
8 is running?

9 MS. O'LEARY: Object to form
10 and foundation.

11 THE WITNESS: Well, the 651
12 was running during that time, right, and
13 the systems were connected. So the water
14 on average that was provided by the
15 system included what was in the
16 reservoirs at 670, and that's
17 basically -- that's basically my
18 understanding of the system.

19 BY MS. BAUGHMAN:

20 Q. Okay.

21 A. So all of this was representative of
22 the system. So some places receive water with low
23 concentration and some places with higher
24 concentrations.

1 The purpose of what I did was to get
2 an estimate, a long-time estimate as I said, of
3 how much concentration of TCE the water supplied
4 by Hadnot Point would contain when the effect of
5 651 is filled.

6 Q. Right. Okay.

7 So let me ask you this.

8 How -- during this time frame of
9 January 27 to February 5, 1985, how were -- how
10 did Hadnot Point water treatment -- Hadnot Point
11 provide the water to Holcomb Boulevard? Like how
12 did Hadnot Point actually get into the Holcomb
13 Boulevard system?

14 A. Right. My understanding is that you
15 have connection -- you have two connections.
16 That's what I recall. And they open, at least one
17 of them, and then it goes into the system. And
18 the distribution system in my assumptions goes
19 through the reservoir of 670 to kind of keep
20 pushing that through.

21 Q. Okay. So you're saying, okay, the
22 connection is in the piping in the water
23 distribution system Hadnot -- between Hadnot Point
24 and Holcomb Boulevard; right?

1 A. (Nods head).

2 Q. Okay. So -- so water in the Hadnot
3 Point water distribution system gets into the
4 Holcomb Boulevard water distribution system;
5 correct?

6 A. (Nods head).

7 Q. Okay. Is there a way for water
8 that's in the water distribution system of Holcomb
9 Boulevard to get into the Holcomb Boulevard Water
10 Treatment Plant?

11 A. It's not a treatment. It's a
12 reservoir. It's not -- it's after the treatment
13 plant. It's a reservoir.

14 Q. Okay. So how does water that's in
15 the Holcomb Boulevard water distribution system
16 end up in the reservoir?

17 A. Because everything is connected.
18 That's my understanding.

19 Q. Are there not valves that prevent
20 water in the water distribution system from
21 backing up into the reservoir?

22 A. I do not know about the valve
23 situation exactly there.

24 Q. Did you investigate that?

1 A. I did not investigate that. I made
2 the assumptions that I made in my -- in my report.

3 Q. Does the Holcomb Boulevard Water
4 Treatment Plant have a backflow prevention from
5 the distribution system into the reservoir?

6 A. That I do not know.

7 Q. Do you know what a check valve is?

8 A. I do.

9 Q. What is it?

10 A. It's -- it's a valve that basically
11 make -- forces a flow to go only in one direction.
12 If it goes in the other one, it tends to shut
13 down, if it's perfectly working.

14 Q. So were there check valves in the
15 Holcomb Boulevard water distribution system to
16 prevent water from the distribution system to back
17 up into the reservoir?

18 A. I do not know. I assume that it was
19 not the case. I assume that the waters that was
20 delivered is the waters that is characterized by
21 this data, and I made that calculation as I
22 explained it. And if I am wrong, well, maybe then
23 I would be corrected if I am shown wrong, but this
24 is what I did.

1 Q. Just a minute.

2 Would it make sense that there would
3 be check valves to prevent water from the Holcomb
4 Boulevard water distribution system from backing
5 up into the reservoir?

6 A. I don't know. I don't have an
7 answer for that.

8 Q. Did you talk to anyone at the
9 Holcomb Boulevard or Hadnot Point who works at
10 those treatment plants or anyone from Camp Lejeune
11 about whether there are check valves that prevent
12 water from the Holcomb Boulevard distribution
13 system from backing up into the reservoir?

14 A. I have not asked that question.

15 Q. Okay. If there were check valves to
16 prevent water from the Holcomb Boulevard water
17 distribution system from backing up into the
18 reservoir, then your -- your numbers for building
19 670 should not have been used in this calculation.

20 Would you agree with me?

21 MS. O'LEARY: Object to
22 foundation.

23 THE WITNESS: Well, we
24 can -- we can argue about that. That

1 depends. Again, that depends on the
2 setup on piping and -- and all of that
3 and whether or not those reservoirs were
4 still providing certain areas with water.

5 BY MS. BAUGHMAN:

6 Q. Well --

7 A. I don't -- I told you, I don't know
8 if there was check valves or not, and I assumed
9 that that was part of the system and that was
10 concentrations that were in the system. That's
11 what I assumed.

12 Q. You assumed that water from the
13 Hadnot Point Water Treatment Plant, while 651 was
14 pumping, would get into the Holcomb Boulevard
15 distribution system and then would be able to back
16 up into the reservoir for Holcomb Boulevard;
17 right?

18 A. Again, I just assume that's part of
19 the system. That's the data for the system. I
20 just made a simple average of all of that to
21 present to long term. Whether it's 582 or 600 or
22 we can argue about that, but I clearly stated the
23 way I did it.

24 Q. Let me ask you.

1 The sample that says building --
2 it's the third one -- building 670 "upstream of
3 reservoir" in your Exhibit 5-3.

4 What does "upstream of reservoir"
5 mean?

6 A. Well, it's upstream of the
7 reservoir.

8 Q. So that's not a sample from the
9 reservoir; right?

10 A. This is just how it was described,
11 and I would interpret that as you say that it's
12 upstream from the reservoir. That means it's as
13 the water flows --

14 Q. That would be part --

15 A. -- it would be before the reservoir,
16 but it could still be treated water. It could
17 still be the water that is being provided.

18 Q. Well, the water that was being
19 provided in that time frame of January 27 to
20 February 5, 1985 was not coming from the Holcomb
21 Boulevard reservoir; right?

22 MS. O'LEARY: Object to
23 foundation.

24 THE WITNESS: Well --

1 BY MS. BAUGHMAN:

2 Q. Because Holcomb Boulevard Water
3 Treatment Plant was shut down; right?

4 A. Well --

5 MS. O'LEARY: Same objection.

6 THE WITNESS: -- what was shut
7 down was the treatment. Right? Because
8 you had some contamination in the system,
9 and that was shut down. You had a fuel
10 leak, if I recall --

11 BY MS. BAUGHMAN:

12 Q. Right.

13 A. -- and that was shut down.

14 Q. Right.

15 Where was the fuel leak? Do you
16 remember?

17 A. It was -- I believe it was on top of
18 one reservoir. I don't remember the details of
19 it.

20 Q. So building 670, the reservoir here
21 that was sampled and included in your
22 calculations, was that the reservoir that had the
23 leak in it?

24 A. I do not know that.

1 Q. Okay.

2 A. It is a description of where exactly
3 the sample was taken. It is not -- I could not
4 figure out exactly the way it was.

5 MS. BAUGHMAN: Okay. I'm
6 going to hand you what I've marked as
7 Exhibit 42 to your deposition.

8 (Document marked for
9 identification as Exhibit 42.)

10 BY MS. BAUGHMAN:

11 Q. And Exhibit 42 is a one-page
12 document Bates-stamped CLJA_USMCGEN and the last
13 four numbers are 6684.

14 Have you seen this document before?

15 A. Specifically that one single page
16 here, I may have seen it. I don't know for sure.

17 Q. Okay. So you see this starts out at
18 the top Sunday, January 27, 1985 at 1300, and it
19 describes what happened there in terms of that
20 gasoline leak.

21 A. Right.

22 Q. Right?

23 And about 25 percent down the page
24 it says:

1 "Then the reservoir was drained of
2 1,000,000 gallons and hosed down with fire hose
3 for several hours."

4 Do you see that?

5 A. Exactly.

6 Q. And that's referring to a reservoir
7 at Holcomb Boulevard Water Treatment Plant;
8 correct?

9 A. That's correct.

10 Q. Okay. And that's all on the entry
11 for Sunday, January 27th; correct?

12 A. That's correct.

13 Q. Then it says:

14 "Monday - January 28th - the
15 reservoir was refilled, at 1400," which would be
16 2:00 PM; correct?

17 And then it says "plant
18 turned" -- oh, I'm sorry.

19 It says "the reservoir was refilled,
20 at 1400 plant turned off."

21 Do you see that?

22 A. I see that.

23 Q. Okay. What water was used to refill
24 that reservoir? Where did it come from?

1 A. Well, that may be the explanation of
2 why you had contamination in that reservoir. It's
3 just -- I don't know exactly where it came from.
4 It may have come from -- partly from Hadnot Point
5 Water Treatment Plant and partly from --

6 Q. But you don't know?

7 A. -- and partly from some wells.
8 I do not know --

9 Q. I mean --

10 A. -- but it was refilled with water
11 and that water was not something that went through
12 the plant.

13 Q. Well, how do you know that it wasn't
14 refilled with water from Holcomb Boulevard?

15 A. Well, I don't know.

16 Q. You don't know either way?

17 A. Either way.

18 Q. Okay.

19 A. But the fact that it had some
20 contamination in it, it may have been a blended
21 matter because you need a million gallon of water
22 to take it where you can.

23 Q. Well, let's talk about that for a
24 minute.

1 If we don't -- if we set aside the
2 upstream of reservoir sample because we don't know
3 where that was taken; right?

4 The four other samples from building
5 670 Holcomb Boulevard reservoir are 8.2, 27, 24,
6 and 26.

7 You see that?

8 A. I see that.

9 Q. They're very low; right?

10 A. Yeah.

11 Q. So we don't know how that reservoir
12 was refilled; correct? What water was used to
13 refill it; fair?

14 A. We don't know --

15 Q. Okay.

16 A. -- but it had some contamination in
17 it.

18 Q. Yeah.

19 If the Holcomb Boulevard reservoir
20 did not have check valves to prevent water from
21 the Holcomb Boulevard distribution system from
22 going into the reservoir, wouldn't the reservoir
23 overflow?

24 A. You have overflow. You have

1 overflow vents or overflow structures in each
2 reservoir. So they could overflow, but if you put
3 more water than the reservoir contains, it would
4 overflow. I mean, that's a logical thing. Right?

5 Q. Do you consider yourself an expert
6 in the design of water treatment plants?

7 MS. O'LEARY: Object to form.

8 THE WITNESS: I am not an
9 expert in the design of water treatment
10 plant.

11 BY MS. BAUGHMAN:

12 Q. Okay.

13 A. But I have seen many of them and I
14 have visited these.

15 Q. Okay. Isn't it normal for a water
16 treatment plant to have a check valve to prevent
17 the water in the distribution system from backing
18 up into the reservoir?

19 MS. O'LEARY: Object to
20 foundation.

21 BY MS. BAUGHMAN:

22 Q. Isn't that the ordinary way these
23 things are designed?

24 MS. O'LEARY: Object to

1 foundation.

2 THE WITNESS: It can be the
3 ordinary way, but specifically for those
4 I do not know.

5 BY MS. BAUGHMAN:

6 Q. Okay. Let me ask you both times.

7 Do you know whether it is standard
8 practice to have a check valve in a water
9 treatment plant to prevent water from the
10 distribution system from backing up into the
11 reservoir? Do you know?

12 A. I -- it would make sense to, but I
13 do not know specifically for those if it was that
14 way.

15 Q. You did not --

16 A. But it would make sense.

17 Q. It would make sense.

18 And you did not investigate whether
19 there was a check valve preventing water from the
20 Holcomb Boulevard distribution system from backing
21 up into the reservoir.

22 You did not look into that; is that
23 true?

24 A. I did not look into that.

1 Q. Okay. And just to be clear to make
2 sure we're on the same page.

3 If you turn to page 5-33 of your
4 report, in Opinion 7, you talk about the Holcomb
5 Boulevard Water Treatment Plant. In the last
6 sentence on this page, you talk about the
7 connection between Hadnot Point and Holcomb
8 Boulevard and you say:

9 "When this occurred" -- you're
10 referring to when -- when there was high demand
11 such that Holcomb Boulevard did not have
12 sufficient water levels. You said:

13 "When this occurred, the Hadnot
14 Point Water Treatment Plant provided supplemental
15 water through a by-pass valve or a booster station
16 that allowed Hadnot Point Water Treatment Plant
17 water to supplement Holcomb Boulevard Water
18 Treatment Plant."

19 Do you see that?

20 A. I see that, yes.

21 Q. Is it your opinion that during the
22 time frame of January 27 to February 5, 1985, it
23 was the by-pass valve or the booster station that
24 allowed Hadnot Point to provide water to the

1 Holcomb Boulevard distribution system?

2 A. That was one of the connections. I
3 don't recall exactly the name of it, but it was
4 -- I think it was one of the connections that was
5 open.

6 Q. Are there any other ways for Hadnot
7 Point to provide water to Holcomb Boulevard, other
8 than this by-pass valve or booster station?

9 A. I think there were two connections,
10 and I don't remember the name of them.

11 Q. Okay. But they're part of the
12 distribution system; right? The two distribution
13 systems are connected?

14 Or there's a way to connect them
15 with a valve?

16 A. Yeah, that's the connections between
17 the two systems. Yeah.

18 Q. Okay. All right.

19 A. That's my understanding.

20 Q. All right. So I want to ask you a
21 few questions about tank SLCH 4004. That's one of
22 the numbers on Exhibit 5-3, the measurement of
23 318.

24 Do you know where that tank is

1 located?

2 A. Hold on. Hold on. You are losing
3 me here. 5-3?

4 Q. Yes. It's page 5-27 of your report.

5 A. Oh, sorry. I thought it was a page.
6 5-3. Start to be a bit mixed up here. Okay.

7 Q. Okay.

8 A. Sorry for that.

9 Q. Okay. You're on -- you're on page
10 5-27 of your report; right?

11 A. Yes.

12 Q. Okay. So I just want to ask a few
13 questions about the sample for tank SLCH 4004.

14 Do you see that?

15 A. Hold on. Hold on. Tank, tank,
16 tank. S-2323?

17 Q. No. S -- it says SLCH 4004.

18 The bottom third of the page.

19 A. Oh, tank SLCH. Okay.

20 Q. Okay. So that has a measurement of
21 318 micrograms per liter.

22 Do you see that?

23 A. I see that.

24 Q. Okay. Do you know where that tank

1 is located?

2 A. I do not recall.

3 Q. Okay. So we looked it up and it's a
4 Midway Park water tower.

5 And would you agree that the Midway
6 Park water tower is furthest from the Hadnot Point
7 Water Treatment Plant?

8 MS. O'LEARY: Object to form
9 and foundation.

10 THE WITNESS: I cannot answer
11 that question just like this. I don't
12 recollect.

13 BY MS. BAUGHMAN:

14 Q. Okay. Okay. Do you know whether
15 there was contaminated water in the Midway Park
16 water tower when Holcomb Boulevard Water Treatment
17 Plant was shut down?

18 MS. O'LEARY: Object to form.

19 THE WITNESS: I don't know
20 that. I don't know.

21 BY MS. BAUGHMAN:

22 Q. Do you know whether there was a mix
23 of Hadnot Point and Holcomb Boulevard water in the
24 Midway Park water tower when this sample was taken

1 on January 31st?

2 A. I don't recollect. I don't -- I
3 don't know. I don't recollect. I mean, this is
4 digging in the details that I don't recollect.

5 Q. Okay. Now, you'd agree that if we
6 don't include, at a minimum, the samples from
7 building 670, the Holcomb Boulevard Water
8 Treatment Plant reservoir, that your number for
9 the average amount of TCE in the water when HP-651
10 was running would be substantially higher?

11 MS. O'LEARY: Object to form.

12 THE WITNESS: I would agree
13 with that.

14 BY MS. BAUGHMAN:

15 Q. Okay.

16 A. If it -- if you exclude those values
17 that are lower than the rest, it will raise the
18 average of. Yes, I agree with that.

19 Q. Okay. So in your report, you talk
20 about performing a check on your calculations.
21 This is on page 5-29.

22 Right after your -- the calculation
23 of .39 times 582, you say that there was a check
24 on the validity of the 220 some microgram per

1 liter average.

2 Do you see that?

3 A. I see that.

4 Q. Okay. And part of that included you
5 used -- in that first sentence, you say that your
6 check on the validity of the 220 some microgram
7 per liter average TCE concentration can be made
8 using ATSDR's assumption of 28 wells pumping. And
9 then you cite Morris Maslia, ATSDR report from
10 March 2013.

11 Do you see that?

12 A. I see that.

13 Q. Okay. So -- so when you're doing
14 this check, you're assuming that 28 wells were
15 pumping at the same time at the Hadnot Point Water
16 Treatment Plant; right?

17 A. Yes. Yes. I borrowed the
18 assumption that -- that ATSDR had done that. You
19 have -- to satisfy the demand, you had an average
20 of 28 wells pumping over the long period of time.

21 MS. BAUGHMAN: I'm handing you
22 what I've marked as Exhibit 43 to your
23 deposition.

24 (Document marked for

1 identification as Exhibit 43.)

2 BY MS. BAUGHMAN:

3 Q. Which is the report that you cite in
4 Footnote 100; correct?

5 And that we'll -- we marked for the
6 record. It's Chapter A: Summary of Findings --
7 Summary and Findings, and this is from Hadnot
8 Point, Holcomb Boulevard, March 2013 and it is
9 Exhibit 43. It starts at CLJA_WATERMODELING_ 01-0
10 000942579.

11 Actually, let me make sure. Let me
12 see that.

13 A. (Hands document).

14 Q. Okay. Good.

15 All right. So I want to go to where
16 you've referenced what you've referenced for the
17 28 wells pumping, which would be on page A14.

18 Wouldn't you agree that what Figure
19 A6 on page A14 is showing is the number of
20 operating wells, not the number of wells pumping
21 at the same time?

22 MS. O'LEARY: Object to
23 foundation.

24 THE WITNESS: Well, my

1 understanding is that my reading of that
2 it was that those were are the ones that
3 are being operated to satisfy the demand
4 that you have on top of that was the
5 figure.

6 BY MS. BAUGHMAN:

7 Q. So if you're looking Figure A5
8 that's on page A12, this shows the operational
9 chronology.

10 This shows when wells were in
11 operation; correct?

12 A. (Reviews document.)

13 Where does it say that?

14 Q. Well, the title is "Operational
15 chronology"; right?

16 A. Yeah.

17 Q. And it's providing when it started
18 and when it stopped?

19 A. Yeah, it says that. Yes.

20 Q. Right. Okay.

21 And then if you turn to page A11, at
22 the very last text at page A11 says:

23 "An operational chronology for
24 water-supply wells in the study area during the

1 period 1942-2008 is shown in Figure A5."

2 Right?

3 "This graph shows dates of operation
4 for each well that supplied raw water to the water
5 treatment plants and the dates when some of the
6 wells were permanently taken out of service."

7 So you agree that's what -- that's
8 what A5 means?

9 A. You lost me. I don't know where you
10 are.

11 Q. Okay. Page A11.

12 A. Yeah.

13 Q. The very last set of text, like the
14 last full sentence on that page. Last two
15 sentences is referring to Figure A5.

16 And it says "An operational
17 chronology" --

18 A. Hold on. I don't know where you
19 are.

20 Q. Look at my. Look at my. You see
21 this pink part here. That's where I'm reading
22 from on page A11.

23 A. Okay. Okay.

24 Q. Okay?

1 A. Thank you.

2 Q. It says:

3 "An operational chronology for
4 water-supply wells in the study area during the
5 period 1942-2008 is shown in Figure A5."

6 Which we were just looking at;
7 right?

8 A. Uh-huh.

9 Q. Okay. "This graph shows dates of
10 operation for each well that supplied raw water to
11 the water treatment plants and the dates when some
12 of the wells were permanently taken out of
13 service."

14 So you agree with me that that's
15 what Figure A5 shows; right?

16 A. That's my understanding, yes.

17 Q. Okay. Then if you look at page A13
18 of this report, there is a sentence. And I'm
19 going to I highlighted it here so you can see
20 generally where on the page it is on A13. Okay?
21 And it says:

22 "Based on documented and
23 reconstructed information, an average of 28 wells
24 supplied water each month to the Hadnot Point

1 Water Treatment Plant during the period
2 1942-2008."

3 You see that?

4 A. I see that.

5 Q. And then that refers to Figure A6,
6 which is what you cited in your -- in your report;
7 right?

8 MS. O'LEARY: Object to form
9 and foundation.

10 THE WITNESS: Okay.

11 BY MS. BAUGHMAN:

12 Q. Okay. So that's an average of 28
13 supplied water each month.

14 That doesn't say that they were
15 supplying them all at the same time, does it?

16 MS. O'LEARY: Object to form
17 and foundation.

18 THE WITNESS: What my reading
19 of this was that to satisfy the demand --
20 for this Figure A6 -- to satisfy the
21 demand that is on top of the figure, this
22 is the wells that you had to operate,
23 and -- and on average, you had to operate
24 28 wells on a monthly average basis

1 to -- to satisfy the demands.

2 That's what -- that's the way
3 I read this.

4 BY MS. BAUGHMAN:

5 Q. Let me ask you about that.

6 I'm going to give you. Okay. I'm
7 handing you what I've marked as Exhibit 44 to your
8 deposition.

9 (Document marked for
10 identification as Exhibit 44.)

11 THE WITNESS: Thank you.

12 BY MS. BAUGHMAN:

13 Q. And the Exhibit 44 I believe is also
14 for the record it's Bates-stamped CLJA?
15 WATERMODELING_07-0000019001 through 19004.

16 Now, I believe that this Exhibit 44
17 actually is in your report. Just have to figure
18 out where. Here it is.

19 Okay. So in your report on page
20 4-18, it's Exhibit I-9 of your report.

21 This is -- this is information that
22 you used to determine -- I'll wait till you get
23 there.

24 Are you looking for your report?

1 A. What page are you?

2 Q. Page 4-18.

3 A. 4-18?

4 Q. Yeah.

5 A. Yes, I am there.

6 Q. Okay. So Exhibit 4-18 is a document
7 that you used to determine the frequency of use of
8 supply wells from November 18, '84 to February 4,
9 '85.

10 You used this to determine that 39
11 percent pumping frequency for HP-651; correct?

12 MS. O'LEARY: Object to form.

13 THE WITNESS: Yes, that's the
14 information that I found --

15 BY MS. BAUGHMAN:

16 Q. Okay.

17 A. -- for that well.

18 Q. Okay. Let me ask you.

19 If you look at this document, the
20 last -- the last 8 wells like on I-9, those
21 are -- those are wells that service Holcomb
22 Boulevard; correct?

23 A. I don't recall that, but it's
24 possible.

1 Q. Okay. Okay. So assuming that's
2 true -- and I believe it is true -- that those are
3 all serving Holcomb Boulevard, one could add up
4 how many wells were operating on each day to
5 figure out.

6 Based on what -- based on your
7 assumption of 28, shouldn't there be 28 wells
8 operating for Hadnot Point each day to make your
9 assumption of 28 correct for your calculation?

10 MS. O'LEARY: Object to form
11 and foundation.

12 THE WITNESS: First of all,
13 the assumption I made is the way I end up
14 with it is what is written in the ATSDR
15 report. Right?

16 BY MS. BAUGHMAN:

17 Q. Okay.

18 A. Now, this period of time here is a
19 particular period of time. It's when you had
20 incidents and -- and some wells were shut down and
21 those kind of issues.

22 So this -- this was during basically
23 the period where they were trying to figure out
24 what the heck is going on and this, you know, some

1 wells were not being used because of that. So --
2 so data, and this is the data.

3 And I looked at that data, and this
4 is 39 percent of the time 651 was down. I have no
5 other data for the frequency of use of 651.

6 Q. Okay.

7 A. It could have been less. It could
8 have been more.

9 Q. But you would agree that this period
10 of time -- November 20, '84 to February 4, 1985 --
11 was not necessarily representative of how the
12 wells were operated in the -- for the Hadnot Point
13 water distribution system because they were making
14 this investigation about contamination; right?

15 A. I --

16 MS. O'LEARY: Object to form
17 and foundation.

18 BY MS. BAUGHMAN:

19 Q. Isn't that what you just said?

20 A. What I said is that during that
21 period of time, some wells had been shut down.
22 Right? So you had less wells available in that
23 sense. And the 39 percent, if you had more wells,
24 logically could have been less. Right?

1 Q. Well, isn't it also true in the
2 seven months prior to your time frame of
3 November 28, '84 to February 4, '85, there were
4 six or seven wells that were new that had just
5 come online?

6 MS. O'LEARY: Object to
7 foundation.

8 THE WITNESS: There were some
9 new ones that were -- that were
10 available.

11 BY MS. BAUGHMAN:

12 Q. And they were being used. They were
13 being pumped?

14 A. Well, that I would --

15 MS. O'LEARY: Objection.
16 Foundation.

17 THE WITNESS: That I would
18 have -- you have to show me where that is
19 being said for those particular wells.

20 BY MS. BAUGHMAN:

21 Q. Okay. Would it surprise you that if
22 you added up on your Exhibit I-9 the number of
23 Hadnot Point wells that were operating from
24 November 28 to February 4 that it was an average

1 of 13 per day?

2 MS. O'LEARY: Object to form
3 and foundation.

4 BY MS. BAUGHMAN:

5 Q. Based on Exhibit I-9?

6 MS. O'LEARY: Same objections.

7 THE WITNESS: It could be,
8 but it is also a period of time where
9 less water was being used as well. You
10 had some period of time historically
11 where more water was because the base was
12 more busy and so on.

13 BY MS. BAUGHMAN:

14 Q. So you're saying from November 28,
15 1984 to February 4, 1985, there was less water
16 being used than normal?

17 A. Well, for just a single system. You
18 have to go back to that figure you had where I
19 say. It's Figure A15 I believe.

20 You know, again, I have to get
21 through memory about those kind of things and if
22 I -- I would like to see that Figure A15 again.

23 Q. A14. A14. I think you're
24 looking --

1 MS. O'LEARY: A5?

2 THE WITNESS: Oh, was it A5.

3 Yeah.

4 BY MS. BAUGHMAN:

5 Q. So we were looking at --

6 A. Yeah, yeah.

7 Q. It's page A12.

8 A. That's Figure A6. A6.

9 Q. Yeah, it's page A14. Okay.

10 A. A6. A6.

11 Q. So let me ask you the question
12 again.

13 Are you -- I think you told me just
14 a minute ago that the time frame of November 28,
15 '84 to February 4, '85 was a time frame when there
16 was less demand for water than normal.

17 Is that your testimony?

18 A. My testimony is that if you go to
19 Figure A6, that shows basically total monthly flow
20 in millions of gallons per day, right, for the
21 Hadnot Point system. You can see that over some
22 period of time it was close to 5 million gallon
23 per day, and when you go down to the -- to the '85
24 percent of time, it was a lot more like 3. So

1 that's much you use less wells because of that.

2 Q. And -- and you'd pump less water
3 from the wells?

4 A. No, I don't think so. I think you
5 use less wells.

6 Q. Okay. So if the demand is lower,
7 then that means the amount of water going through
8 the treatment plant is lower; right?

9 A. Yes.

10 Q. Okay. So you'd need less water from
11 the wells; right?

12 A. No. You need less wells.

13 Q. And less water?

14 A. You need less number of wells to use
15 the water you need.

16 Q. Right, which is a lower amount of
17 water than normal?

18 A. Not normal. That's the amount of
19 water you need. So how many wells you need to
20 provide that water because those wells, basically
21 when you put them on, they produce what they
22 produce.

23 Q. Okay. So in the earlier time frame,
24 let's say from the 1940s all the way through

1 January 1970, there would be more wells being
2 operated.

3 Is that what you're saying?

4 MS. O'LEARY: Object to form.

5 THE WITNESS: I would -- I
6 would logically say yes, you need more
7 wells during that period of time. Yes.

8 BY MS. BAUGHMAN:

9 Q. Okay. So when you're doing this
10 check on the system, you assumed 28 wells pumping
11 and 39 percent frequency of use for 651?

12 MS. O'LEARY: What page is
13 that?

14 MS. BAUGHMAN: Page 529 at the
15 bottom.

16 BY MS. BAUGHMAN:

17 Q. And you used a value of 16,297 in
18 water pumped from Hadnot Point 651; right?

19 A. That's a reasonable calculation.

20 Q. Okay.

21 A. Right? That means you had high
22 contamination in 651. That's what it says.

23 Q. Uh-huh.

24 A. And it's pretty close to what was

1 measured in 651.

2 Q. Right, but you're talking about a
3 measured -- so the end of the sentence you say:

4 "Which is consistent with the
5 measured TCE concentration of 18,900 micrograms
6 per liter when supply well HP-651 was pumping in
7 February 1985."

8 Correct?

9 A. Yeah.

10 Q. Okay.

11 A. That's why you have a measurement.

12 Q. But while you're doing this
13 measurement in February '85, there weren't 28
14 wells pumping then. There was much less; right?

15 MS. O'LEARY: Object to
16 foundation.

17 THE WITNESS: Yes, and if you
18 have less wells, that means the
19 concentration would have been higher.

20 BY MS. BAUGHMAN:

21 Q. Right.

22 A. On the calculated concentration
23 would have been higher and closer to the 19,000.

24 Q. But it wouldn't be correct -- the

1 calculations at the top of page 530, it wasn't
2 correct to use 28 divided by .83 because there
3 weren't 28 wells pumping in February 1985.

4 We know that based on your Exhibit
5 I-9 where you can count the number of X's and
6 determine in that time frame how many wells were
7 pumping; right?

8 MS. O'LEARY: Object to form
9 and foundation.

10 THE WITNESS: Yes, and, again,
11 I am talking about long term here.

12 BY MS. BAUGHMAN:

13 Q. But this calculation wasn't done for
14 long term. This is --

15 A. No, it is. The calculation compares
16 just two things. It's what you would calculate
17 making the assumption that I made. Right? It's
18 28 wells and the average concentration. That's
19 what you would calculate. You get 16,000.

20 What was measured in a device
21 19,000. For me, this indicates that this well was
22 heavily contaminated. I am not saying that it's
23 an exact value. It was heavily contaminated and
24 it's consistent with that.

1 Q. Okay. But your calculation is
2 dividing by 28 wells --

3 A. Yes.

4 Q. -- for a number from February 1985
5 and there were not 28 wells --

6 A. Right.

7 Q. -- pumping in '85; correct?

8 A. Well, according to the information
9 we have, there were less wells pumping then.

10 Q. Right.

11 A. But that will give you
12 concentrations at a higher. That is consistent
13 with this well 651 being the well that is heavily
14 contaminated.

15 Q. I'm going to ask you some more
16 questions about Exhibit I-9 in your report. So
17 going back to page 4-18 of your report.

18 We agreed that this is the data that
19 you used to determine -- to reach your result that
20 Hadnot Point 651 pumped 39 percent of the time;
21 correct?

22 A. Again, which page is that?

23 Q. 4-18.

24 A. Sorry. Okay.

1 That's the only data available that
2 shows you by the people who are working there
3 which wells were on, which wells were off --

4 Q. Okay.

5 A. -- during the period of time that is
6 dated.

7 Q. Let me ask you about that then.

8 Who prepared the document that is
9 your Exhibit I-9? Who -- who prepared it?

10 A. Well, basically it is a reproduction
11 of what is in Exhibit 44.

12 Q. Right.

13 A. Which is handwritten and put into an
14 Excel spreadsheet.

15 Q. Okay.

16 A. And I probably have one of my staff
17 to do it.

18 Q. Okay. So let me -- let me ask a
19 different question.

20 Who prepared Exhibit 44?

21 A. Somebody at the base.

22 Q. Who at the base?

23 A. I do not know.

24 Q. When was Exhibit 44 prepared?

1 And wait. For the record, I think
2 you just said this, but just for the record,
3 Exhibit 44 is the document that is the basis for
4 your Exhibit I-9; correct?

5 A. Yes.

6 Q. Okay. When was Exhibit 44 prepared?

7 A. The exact date I don't know, but it
8 would have been after, after the last date that
9 you have on the -- on this, which is, you know,
10 after January 6, 1985.

11 Q. Okay. But do you know if it was
12 prepared in 1985 or years after that?

13 A. That I do not know. That's the only
14 document we found that is an independent document,
15 that is, doesn't have any -- anything that's done
16 by, you know, either me or somebody else. It's
17 -- that's the information that's out there in the
18 file.

19 Q. Right.

20 But you don't know when it was
21 prepared? You do not know when Exhibit 44 was
22 prepared; correct?

23 A. Well, I do not know when exactly it
24 was prepared, no.

1 Q. Okay. Do you know what the source
2 of information was? In other words, whoever
3 prepared Exhibit 44, what did they use to prepare
4 this?

5 A. They use their knowledge of the
6 system. That's what I understand.

7 Q. You understand based on what?

8 A. Because it was prepared for them
9 when they were just trying to figure out the
10 problem and -- and, you know, I don't know who did
11 that, but it was not done by either ATSDR or
12 myself or anybody else. It was done by people
13 that worked at the plant, and this is basically
14 something that you accept like you accept data
15 sheets from the laboratories that are handwritten.

16 Q. How do you know it was -- how do you
17 know Exhibit 44 was prepared by someone at the
18 plant? Where does it say that?

19 A. Well, that's my deduction because it
20 was part of the documents that were basically
21 archived and -- and produced, and those documents
22 were from the base. They were not from anybody
23 else.

24 Q. So do you know whether Exhibit 44

1 was prepared based on other documents and data, or
2 was it prepared as things were happening at the
3 time? Like what was the source of the information
4 used to prepare Exhibit 44?

5 MS. O'LEARY: Object to form.

6 THE WITNESS: My
7 understanding is that the knowledge of
8 the people at the plant and for some
9 reason that was done.

10 BY MS. BAUGHMAN:

11 Q. You say that's your understanding.
12 That's you're speculating, aren't
13 you?

14 MS. O'LEARY: Object to form.

15 THE WITNESS: Well, I am
16 taking that as information that's
17 independent and that's available.

18 BY MS. BAUGHMAN:

19 Q. Okay. But you don't know who
20 prepared Exhibit 44 and you don't know when it was
21 prepared; right?

22 MS. O'LEARY: Object to form.

23 Asked and answered.

24 THE WITNESS: I answered

1 that.

2 I do not know who prepared it,
3 and I don't know exactly when it was
4 prepared.

5 BY MS. BAUGHMAN:

6 Q. Okay. And you don't know how it was
7 prepared. Based on some compilation of other
8 information or data you don't know how this was
9 prepared; fair?

10 MS. O'LEARY: Object to form.

11 THE WITNESS: Somebody at the
12 water treatment plant put this together
13 at some point. That's all I know.

14 BY MS. BAUGHMAN:

15 Q. But you don't know what they based
16 it on?

17 MS. O'LEARY: Object to form.

18 THE WITNESS: I know they
19 based it on their knowledge.

20 BY MS. BAUGHMAN:

21 Q. And that's your guess?

22 MS. O'LEARY: Object to form.

23 THE WITNESS: Obviously, I
24 did not invent that. They based it on

1 their knowledge.

2 BY MS. BAUGHMAN:

3 Q. And you're basing that on what?

4 A. You don't generate a document like
5 this in the archived material just dreaming of it.
6 You base it on something which is knowledge, and
7 that's my understanding and that's -- that's the
8 only document that talks about how often the wells
9 were cycled, and it is in the record that the
10 wells were cycled. They were not always on. None
11 of them were always on.

12 Q. Have you had any conversations with
13 anyone who worked at any water -- at the Hadnot
14 Point -- well, this is about the Hadnot Point
15 Water Treatment Plant; right?

16 So have you had any conversations
17 with anyone who worked at Hadnot Point Water
18 Treatment Plant about Exhibit 44?

19 MS. O'LEARY: Object to form.

20 THE WITNESS: I don't recall
21 exactly, but I think that I had asked. I
22 mean, nobody knew anything about that.
23 That's my understanding.

24 And the reason nobody knew

1 about that is because the people who are
2 still there, or were still there in 2005
3 and later, weren't there when that was
4 done. That's all I know, or at least
5 none of them knew about who did that.

6 BY MS. BAUGHMAN:

7 Q. Okay. So -- so you actually took
8 this Exhibit 44 to Hadnot Point and asked people
9 who worked there about it?

10 A. No.

11 MS. O'LEARY: Object to form
12 and foundation.

13 THE WITNESS: Sorry.

14 I did not do that. I did not
15 take this and show them who did this. I
16 just -- I vaguely recall that I ask, you
17 know, you have some information on when
18 the wells were used or not and who knows
19 about that, and there was nobody there
20 who knew about it.

21 BY MS. BAUGHMAN:

22 Q. Okay.

23 A. Of the frequency of use of the
24 wells.

1 Q. So you haven't asked anyone who
2 worked at the water -- at the Hadnot Point Water
3 Treatment Plant specifically about Exhibit 44; is
4 that true?

5 A. I don't recall if I did or not, but
6 nobody -- my recollection is that nobody knew
7 anything about this.

8 MS. O'LEARY: Have we been
9 going --

10 THE WITNESS: That are still
11 there.

12 MS. O'LEARY: Sorry. We've
13 been going a little over an hour. Can we
14 take a just a short break?

15 MS. BAUGHMAN: Let me just
16 finish up on a couple of things on this
17 and then we can do that.

18 BY MS. BAUGHMAN:

19 Q. Okay. Can you tell me the name of
20 anyone who you spoke to regarding Exhibit 44 and
21 how it was prepared?

22 MS. O'LEARY: Object to
23 foundation.

24 THE WITNESS: I cannot tell

1 you the name of anyone.

2 MS. BAUGHMAN: Okay. If you
3 want, we can take a break. That's fine.

4 THE VIDEOGRAPHER: The time is
5 12:52 PM. We are now off the record.

6 (A recess was taken.)

7 THE VIDEOGRAPHER: The time is
8 1:06 PM. We are now on the record.

9 MS. BAUGHMAN: Thank you.

10 BY MS. BAUGHMAN:

11 Q. Okay. Dr. Hennet, I'm going to hand
12 you what I've marked as Exhibits 45 and 46 to your
13 deposition.

14 (Document marked for
15 identification as Exhibit 45.)

16 (Document marked for
17 identification as Exhibit 46.)

18 BY MS. BAUGHMAN:

19 Q. Exhibit 45 is CLJA_WATERMODELING_
20 050001040308 through 319, and it starts "Questions
21 for Mr. Mundt" dated August 5, 2008.

22 Exhibit 46 is CLJA_UST02-0004149161
23 through 9194.

24 Okay. There you go.

1 A. Thank you.

2 MS. BAUGHMAN: And let me give
3 you. There you go.

4 BY MS. BAUGHMAN:

5 Q. Okay. So have you seen these
6 documents before?

7 A. (Reviews document.)

8 Q. And I'll provide some context if it
9 helps.

10 Exhibit 45 are questions sent by
11 ATSDR to Mr. Mundt, who is a water treatment plant
12 employee, and Exhibit 46 are the answers that were
13 provided back.

14 So with that context, are these
15 documents you've reviewed before?

16 A. I don't know. I don't recollect
17 those documents.

18 Q. You don't recall them?

19 A. I don't recall them. I don't know
20 if I ever saw them. I don't know.

21 Q. Okay. All right. So what I want to
22 draw your attention to is, 45 just has the blank
23 questions, right, that were sent. 46 are the
24 answers that the ATSDR received back.

1 And if you go to page that's
2 Bates-stamped the last three numbers are 165 of
3 Exhibit 46. Question number 6.

4 A. Wait. Hold on. Can you repeat
5 that? I was on the other exhibit.

6 Q. Yeah. It's Exhibit 46. The last
7 three numbers are 165.

8 A. Okay.

9 Q. Okay. So question number 6. ATSDR
10 asked:

11 "We found documents showing the
12 daily pumping status for all Hadnot Point wells
13 from November 28, 1984 to February 4, 1985."

14 And they reference a CLW number,
15 which if you compare, matches Exhibit 44.

16 A. The first page of Exhibit 44 is?

17 Q. You look, you see the CLW number in
18 the middle? Look where I'm pointing to.

19 A. Oh, I see that, yes.

20 Q. 6590?

21 A. Yeah. Yeah.

22 Q. And it's 6590. So they sent.
23 They're asking about this document. Okay?

24 A. Uh-huh.

1 Q. So it says we found doc -- they're
2 asking about Exhibit 44, which is in your report
3 Exhibit I-9, and they say:

4 "We found documents showing the
5 daily pumping status for all Hadnot Point wells
6 from November 28, '84 to February 4, 1985."

7 And they give the CLW number of 6590
8 through 6593.

9 "Do any similar documents exist that
10 might help us gain a better understanding of how
11 wells were operated on a day-to-day basis
12 historically?"

13 The answer is:

14 "We need more information. Where
15 did the X's come from? If the information was
16 taken off of the sheets and transferred to the CLW
17 6590, where are the original sheets the
18 information came off? We do not know of any other
19 documents that might exist."

20 Did I read that correctly?

21 A. You did.

22 Q. Okay. Do you know where the X's
23 came from?

24 MS. O'LEARY: Object to

1 foundation.

2 THE WITNESS: Somebody at the
3 base at the water treatment plant
4 generated this document. I answered
5 before. I don't know who and I don't
6 know exactly when.

7 BY MS. BAUGHMAN:

8 Q. Or, well, they say: "Was it taken
9 off the sheets?" And it says: "Where are the
10 original sheets the information came off?"

11 Do you know the answer to that?
12 Where are the original sheets that this
13 information came from?

14 MS. O'LEARY: Object to
15 foundation.

16 BY MS. BAUGHMAN:

17 Q. For Exhibit 44?

18 MS. O'LEARY: Object to
19 foundation.

20 THE WITNESS: I haven't seen
21 any sheets that -- and it appears that I
22 am not the only one who haven't seen any.

23 BY MS. BAUGHMAN:

24 Q. Right. Okay.

1 So ATSDR asked people at the water
2 treatment plant where this Exhibit 44 information
3 came from, and they didn't know; right?

4 A. It appears to be.

5 Q. Yeah. But this isn't information
6 that you had reviewed prior to signing off on your
7 report in December of 2024; right?

8 MS. O'LEARY: Object to form
9 and foundation.

10 THE WITNESS: I say I don't
11 recollect this. I don't know if I saw it
12 in the past or not. I don't recollect
13 this.

14 BY MS. BAUGHMAN:

15 Q. This isn't cited in your report, is
16 it?

17 A. I would have to check, but I don't
18 think so.

19 Q. Okay. What did you do to verify the
20 accuracy of the data in your Exhibit I-9,
21 Exhibit -- which is Exhibit 44?

22 A. Well, since I couldn't find anything
23 else and it was not generated by either ATSDR,
24 myself or other, you know, other people here, my

1 assumption was that's from the base personnel who
2 did that and put it in the archives, and that I
3 just did it based on their knowledge and that's
4 all I could do.

5 Q. I'm going to object as
6 nonresponsive.

7 Did you do anything to verify the
8 accuracy of the data that is on your Exhibit I-9
9 in your report and that we've marked as Exhibit
10 44?

11 MS. O'LEARY: Object to form.

12 THE WITNESS: Well, this is
13 basically a document, an original
14 document in the files that has this
15 information, and I considered that.

16 BY MS. BAUGHMAN:

17 Q. Did you do anything to verify the
18 accuracy of Exhibit 44?

19 MS. O'LEARY: Object to form.

20 THE WITNESS: I could not do
21 more than just take this document as
22 being an original document, just like
23 ATSDR did for many documents, including
24 the data sheets or the laboratory reports

1 or the handwritten notes and all of that,
2 I mean.

3 BY MS. BAUGHMAN:

4 Q. So you assumed it was accurate. You
5 didn't do anything to verify?

6 MS. O'LEARY: Object to form.

7 THE WITNESS: I assumed that
8 this is information and that is the only
9 information that is found on the
10 frequency of use of the wells.

11 BY MS. BAUGHMAN:

12 Q. Okay. I'm handing you what I've
13 marked as Exhibit 47 to your deposition.

14 A. Thank you.

15 (Document marked for
16 identification as Exhibit 47.)

17 BY MS. BAUGHMAN:

18 Q. Exhibit 47 is stamped CLJA_USMCGEN a
19 bunch of 0s then 4794 through 4798 and it is a
20 handwritten document as well.

21 Have you reviewed this document
22 before?

23 A. (Reviews document.)

24 It kind of sounds familiar, but I

1 don't know for sure.

2 Q. Okay. If you look at page 3, you
3 see that it says at the top "Wells that were on."

4 Do you see that?

5 And it lists dates January 28, '85;
6 January 29; January 30; January 31st, all 1985.
7 And then you go to the next page. February 1,
8 '85; February 2, February 3, February 4th of '85.

9 Do you see that?

10 A. I see that.

11 Q. Okay. So the date range of the
12 wells that were on is January 28, '85 to
13 February 4, '85, similar to the time frame covered
14 in Exhibit 44; correct?

15 MS. O'LEARY: Object to
16 foundation.

17 BY MS. BAUGHMAN:

18 Q. At least it covers some of that time
19 frame?

20 A. It covers some of that time frame.

21 Q. It covers most of the time frame
22 when Holcomb Boulevard Water Treatment Plant was
23 shut down; right?

24 A. According to the dates, yes.

1 Q. Okay. Did you compare as part of
2 your work in this case the information on Exhibit
3 47 to Exhibit 44 to see if they match up?

4 A. I don't recall. That would be
5 another source of information, but I don't recall
6 if I did compare it or not.

7 Q. I mean, do you -- do you recall
8 comparing any other data to Exhibit 44 to see if
9 Exhibit 44 was accurate?

10 A. Well, again, I don't recall exactly
11 what I did there, but I notice that on this, you
12 know, sometimes you have more than 20 wells
13 operating. Sometimes you have less. If that's
14 what you're after.

15 Q. Okay. I'm going to object as
16 nonresponsive.

17 I'm asking you: When you wrote your
18 report in this case -- and I'm going back to
19 Exhibit 44 -- did you compare it to any other
20 data?

21 A. Well, I did not -- I do not recall
22 having considered this or seen this. I may have
23 seen it and in my report I relied on Exhibit 44.
24 That's that.

1 Q. Is there any basis to rely on
2 Exhibit 44 as opposed to Exhibit 47?

3 A. Well, probably not. It's -- let's
4 say probably not. It's two different documents
5 that should be look and if there are differences
6 it gives you an appreciation of the uncertainty on
7 the information. And, again, it's all for short
8 period of time.

9 Exhibit 44 was for a longer period
10 of time, and I guess that's -- that's -- that
11 allowed me to do some percentage of well being
12 used better than this one would have because this
13 one is a much shorter period of time.

14 Q. Sure.

15 But if there are discrepancies
16 between Exhibit 44 and Exhibit 47, that would tell
17 you that there is some uncertainty or error
18 potential in Exhibit 44; correct?

19 A. Yes, yes. And I am not sure, but I
20 vaguely recollect that I may have looked for 651
21 if it was different or not, but, again, this is by
22 memory. I don't remember.

23 Q. Okay. Well, you didn't write
24 anything in your report about --

1 A. No.

2 Q. -- Exhibit 44, did you?

3 A. I don't -- I didn't do. I didn't do
4 that, no.

5 Q. Okay. Would it surprise you that if
6 I -- if you went through the exercise of comparing
7 Exhibit 44 to Exhibit 47 that there are
8 discrepancies for every day from January 28 to
9 February 4 in terms of which wells were on and
10 which wells were off?

11 MS. O'LEARY: Object to
12 foundation.

13 BY MS. BAUGHMAN:

14 Q. At least one discrepancy per day?

15 MS. O'LEARY: Object to
16 foundation.

17 THE WITNESS: I wouldn't be
18 surprised if there are discrepancies but,
19 you know, you have information. I would
20 compare the 651 and those kind of things.

21 This is some things that I
22 vaguely remember having seen, but I
23 relied on the Exhibit 44 because it was
24 longer period of time. That one has 69

1 days for information, and I understand
2 that you have some and you have a lot of
3 through the records that things that are
4 not always consistent.

5 So you just, you know, you
6 just clearly say what and state what you
7 did, and I did that in my report. I did
8 say exactly what I did. So you can read
9 it.

10 BY MS. BAUGHMAN:

11 Q. Well, you didn't report to the court
12 that there is uncertainty in the data, that you
13 compared it to other data, and there were
14 mismatches.

15 You didn't report that, did you?

16 MS. O'LEARY: Objection.

17 BY MS. BAUGHMAN:

18 Q. You did not include that in your
19 report?

20 MS. O'LEARY: Object to form
21 and foundation.

22 THE WITNESS: Specifically on
23 this one, I don't think I did that in my
24 report.

1 BY MS. BAUGHMAN:

2 Q. Right.

3 So you're saying you think you were
4 aware of Exhibit 47. You compared it. You know
5 that there were discrepancies, and you did not
6 inform the court of that?

7 MS. O'LEARY: Object to form
8 and foundation.

9 THE WITNESS: I didn't say
10 that.

11 I say that this vaguely
12 resembles some things that I may have
13 seen, but I relied on this one because it
14 had the most longest period of time.

15 Because what I was interested
16 in was what was the frequency of use of
17 well 651, and you don't get that from
18 this. You get that from that.

19 BY MS. BAUGHMAN:

20 Q. But if you compare the two and you
21 see that there are discrepancies, that tells you
22 that there is an error rate in your data; right?

23 MS. O'LEARY: Object to form.
24 Already asked and answered.

1 THE WITNESS: I do not know
2 there are discrepancies on 651. I don't
3 recall that.

4 BY MS. BAUGHMAN:

5 Q. Since Exhibit 44 does not indicate
6 what the source is of the data, there's no way it
7 can be verified; right?

8 MS. O'LEARY: Object to
9 foundation.

10 THE WITNESS: Please can you
11 repeat the question.

12 BY MS. BAUGHMAN:

13 Q. Since Exhibit 44 does not list the
14 source of the data for the X's on the document,
15 there's no way you can determine if it's
16 accurate --

17 MS. O'LEARY: Object to form.

18 BY MS. BAUGHMAN:

19 Q. -- or verify the accuracy?

20 MS. O'LEARY: Object to form
21 and foundation.

22 THE WITNESS: That's specific
23 of the nature of the information
24 available.

1 BY MS. BAUGHMAN:

2 Q. So HP-651 was put in service in July
3 of '72; right?

4 MS. O'LEARY: Object to
5 foundation.

6 THE WITNESS: That's my
7 recollection.

8 BY MS. BAUGHMAN:

9 Q. Yeah. That's what it says in your
10 report; correct?

11 A. Show me where --

12 Q. Sure.

13 A. -- but that's my recollection.

14 Q. Yeah. I'm happy to show you where.
15 Let's see here.

16 A. (Reviews document.)

17 Q. Page 5-22. 5-22 at the bottom of
18 the page you have opinions for Hadnot Point.

19 A. Yes.

20 Q. Okay. And your first sentence under
21 Opinion 5 says:

22 "Supply wells HP-651 only supplied
23 water to the Hadnot Point Water Treatment Plant
24 from July 1972 until February 5, 1985."

1 Correct?

2 A. That's my understanding, yes.

3 Q. Okay. That's your understanding.

4 So if you add up the number of
5 months then that HP-651 was operating, that would
6 be -- it's 12 and a half years. So that would be
7 153 months.

8 Does that sound right?

9 A. I take your word for it.

10 Q. Okay. And what you've done is
11 you've used two months of data that is on your
12 Exhibit I-9, our Exhibit 44, and you've
13 represented that that is a surrogate for the other
14 151 months that 651 was operating; right?

15 MS. O'LEARY: Object to
16 foundation.

17 THE WITNESS: That's the only
18 information that I found.

19 BY MS. BAUGHMAN:

20 Q. But I've accurately represented what
21 you did; correct?

22 MS. O'LEARY: Object to
23 foundation.

24 THE WITNESS: That's what I

1 did, and based on that information, you
2 get 39 percent frequency of use for that
3 particular well.

4 BY MS. BAUGHMAN:

5 Q. Right.

6 A. That's the only information for the
7 frequency of use for that wells that I could find.

8 Q. Okay. And just -- just to be sure,
9 just to restate it to make sure we're on the same
10 page.

11 You took two months of data from the
12 end of November of '84 until the beginning of
13 February of '85. You calculated that HP-651 is
14 operating 39 percent of the time, and from that
15 you've assumed that it was always operating at 39
16 percent of the time for the entirety of the 153
17 months that it was in operation.

18 Correct?

19 MS. O'LEARY: Object to form
20 and foundation.

21 THE WITNESS: Yes, and it is
22 consistent with the fact that the wells
23 were cycled by -- by design and it is
24 consistent.

1 BY MS. BAUGHMAN:

2 Q. So the wells were cycled by design
3 on and off; right?

4 A. Right.

5 Q. That was to avoid driving low
6 quality water into the water distribution system;
7 right?

8 A. Yes, that was by design --

9 Q. Okay.

10 A. -- and they were cycled on the other
11 well in more than 30 of them and they were cycling
12 them.

13 Q. So in terms of the cycling, was it
14 typical for the cycling to be consistent each
15 month, or was the cycling such that in some months
16 some wells would be used more and in some months
17 some wells would be used less?

18 A. We only have data for basically two
19 and a half months or a little bit more than two
20 months. So, you know, you cannot -- I agree that
21 you cannot generalize, but that's the only
22 information we have.

23 Q. Did you ask --

24 A. We know that it was not 100 percent

1 and we know that it was not zero percent. So you
2 have some information that suppose 39 percent. So
3 what else can I use?

4 Q. Okay. Did you ask -- did you talk
5 to anyone at the water treatment plant about what
6 the normal operation was in terms of cycling of
7 the wells at Hadnot Point?

8 A. I did and they said they cycle them,
9 and the thing is historically I don't know exactly
10 how they did it, but right now everything is
11 automated. So they can stop them, you know, not
12 manually, but at the time they were just starting
13 the wells manually.

14 Q. Okay.

15 A. Just go and prepare them and it's
16 on, and then the next week somebody tells you shut
17 down this one, open that one for some reasons, and
18 that's the way it was done.

19 Q. Isn't it true that the ATSDR had
20 data on the cycling of the wells for a period of
21 10 years from 1998 to 2008?

22 MS. O'LEARY: Object to
23 foundation.

24 THE WITNESS: Yes, but I use

1 that as completely not representative
2 from what happened before the problems
3 were discovered.

4 BY MS. BAUGHMAN:

5 Q. And what -- for what reason?

6 A. Just -- just because it was a
7 different setting, different setting after, you
8 know, for that period of time for which you know
9 which wells were on and off, and -- and that
10 includes the well for which they have data. It
11 includes none of the ones that are -- that were
12 contaminated, and the only information that
13 is -- that is available for that frequency of use
14 is what I just mentioned. It's -- it's Exhibit
15 44.

16 Q. Well, did you have available to you
17 the 10 years of -- of pumping data from 1998 to
18 2008?

19 A. Yes, but in my opinion that, you
20 know, extrapolating that all the way to 1950 is --
21 is just kind of a -- it's one way to do it, but
22 that doesn't mean it's right at all.

23 Q. Did you compare your methodology
24 from Exhibit 44 to the 10 years of data from 1998

1 to 2008 to see whether your methodology was valid?

2 MS. O'LEARY: Object to form
3 and foundation.

4 THE WITNESS: At least the
5 data I considered is within the period
6 that contamination was there.

7 BY MS. BAUGHMAN:

8 Q. Object as nonresponsive.

9 As a check on your methodology, did
10 you compare the data that you had in Exhibit 44 to
11 the 10 years of data from '98 to 2008?

12 MS. O'LEARY: Object to form
13 and foundation.

14 THE WITNESS: I didn't do
15 that because I don't think it's
16 representative to make such a comparison.

17 BY MS. BAUGHMAN:

18 Q. There are some wells that were
19 operating during the time frame of Exhibit 44 that
20 were also operating from '98 to 2008; right?

21 A. Yes.

22 Q. So you could look at that to see
23 whether -- how often were those wells used in
24 Exhibit 44, how often were they used in '98 to

1 2008 to see whether it matched up?

2 A. I didn't do that.

3 Q. You did not?

4 A. I did not.

5 Q. Okay. Do you know whether the data
6 from '98 to 2008 indicates that the cycling
7 occurred more in the period of months as opposed
8 to days? In other words, certain -- some wells
9 weren't used for a given month and then they were
10 used more in the next month, or was it more in
11 cycling in a matter a daily operation?

12 MS. O'LEARY: Object to form.

13 BY MS. BAUGHMAN:

14 Q. Did you look at that to see?

15 MS. O'LEARY: Object to form.

16 THE WITNESS: My
17 understanding is, I did not consider that
18 because my understanding of it is
19 everything changed.

20 BY MS. BAUGHMAN:

21 Q. Why did everything change?

22 A. Because they just modernized and
23 they just basically learn much more about the
24 system after the problems were discovered, and

1 they modernized and they had new wells and they
2 had all kind of new information and said do not
3 operate like they did in 1950.

4 Q. Okay.

5 A. That's my understanding.

6 Q. And who did you rely on for that
7 information?

8 A. Well, for -- well, several things,
9 but one thing I recall I just -- when I was
10 talking to the people at the water treatment
11 plant, I just said, you know, things have changed
12 and they, oh, everything is much modern now. We
13 have scatter system, we have this, we have that,
14 and they have learned a lot and they've modernized
15 and that's expected.

16 Q. That conversation occurred in when?
17 2025?

18 A. Probably before in some of my
19 visits. That would have been during my visits.

20 Q. So when was the conversation about
21 the modernization that you just talked about?
22 When did you have that conversation?

23 A. It was -- it was previous visit
24 because that was the first time that they were

1 just showing me the way the scatter system and so
2 on and it was not the last visit. It was before.

3 Q. For this case or for another case?

4 A. I do not recollect that.

5 Q. Okay. Who did you speak to?

6 A. The people at the water treatment
7 plant.

8 Q. The name. I want the name.

9 A. I did not ask name because
10 everybody -- that was basically the rule of the
11 game is you can talk to people, but you don't ask
12 name and take notes of names.

13 Q. Okay. When did -- the person who
14 told you this information about modernization,
15 when -- what was the years that that person worked
16 at the water treatment plant?

17 A. Probably quite recent because nobody
18 there was there in the '80s that I understand.

19 Q. Were they there from '98 to 2008?

20 A. Possibly.

21 Q. Did you ask?

22 A. I didn't -- I don't recall.

23 Q. Okay. Is it your opinion that
24 December 1984 represents a typical month for the

1 Hadnot Point water distribution system in terms of
2 from the 1950s up until 1983?

3 MS. O'LEARY: Object to form.

4 THE WITNESS: Can you repeat
5 please?

6 BY MS. BAUGHMAN:

7 Q. Yeah. Does December 1984 represent
8 a typical month for the Hadnot Point Water
9 Treatment Plant's operation and well cycling as
10 compared to the three decades prior?

11 MS. O'LEARY: Object to form.

12 THE WITNESS: In 1984, there
13 the problem was being investigated. The
14 problem was there and there were wells
15 that were shut down. They were trying to
16 understand what was going on.

17 So it is what it is and we
18 have the information we have for that
19 period of time and, you know, what --
20 what we know for the -- from the 1950s to
21 the present is -- is not that
22 well-documented as far as exactly what
23 they were doing.

24 But the big picture is

1 documented. There were cycling wells,
2 and when the wells would just produce
3 less, they would just stop them and
4 maintain them and so on and that's the
5 type of an operations that -- excuse
6 me -- that is consistent with what you do
7 when you have a field of producing wells.

8 BY MS. BAUGHMAN:

9 Q. Okay. I'm going to object as
10 nonresponsive.

11 December 1984 was not a typical
12 month for Hadnot Point Water Treatment Plant
13 operation because they were investigating the
14 contamination at that time; right?

15 MS. O'LEARY: Object to form.

16 THE WITNESS: In that sense
17 it was, but they still had to produce
18 water to supply water.

19 BY MS. BAUGHMAN:

20 Q. Okay. And you'd agree with me that
21 new wells that seven new wells -- 611, 614, 621,
22 627 and 639 -- those are all new wells that had
23 come online less than seven months prior to
24 December of '84; right?

1 MS. O'LEARY: Object to
2 foundation.

3 THE WITNESS: I would have to
4 double-check that. I don't recall the
5 numbers anymore of the wells.

6 BY MS. BAUGHMAN:

7 Q. Okay. Would it surprise you that
8 those seven new wells -- 611, 614, 621, 627, and
9 639 -- had the capacity to supply half of the
10 water needed for the Hadnot Point Water Treatment
11 Plant?

12 MS. O'LEARY: Object to
13 foundation.

14 THE WITNESS: Again, I will
15 have to check and capacity doesn't mean
16 what they can produce.

17 BY MS. BAUGHMAN:

18 Q. Right.

19 A. It's the capacity.

20 Q. Did you evaluate, did you perform
21 the exercise of looking at Exhibit 44, your
22 Exhibit I-9 in your report, to see how often the
23 those seven new wells were used in that two-month
24 time frame?

1 MS. O'LEARY: Object to
2 foundation.

3 THE WITNESS: I did not
4 evaluate that and -- and if the capacity
5 was higher, maybe they were -- the
6 schedule of cycling was different.

7 BY MS. BAUGHMAN:

8 Q. As compared to in the years prior
9 when --

10 A. Yes.

11 Q. -- those wells weren't there; right?

12 A. Yeah.

13 Q. Okay. Okay. I'm going to ask -- I
14 want to ask you about a different subject matter.

15 If you could turn to your Opinion
16 number 11, I'll try to -- that is -- hold on.

17 So your Opinion number 11 on page
18 5-37. You're critical there of ATSDR for not
19 including available site-specific data; right?

20 In fact, if you turn to 5-38, in
21 your in summary part of 5-38, you say -- you
22 reference parameters that are inconsistent with
23 site-specific data.

24 Is there any site-specific data that

1 you claim ATSDR did not consider other than the
2 FOC, or fraction organic carbon data?

3 A. Well, that's the one that really
4 matters. In addition to the errors I did for the
5 Tarawa Terrace model, but that's the one that is
6 important for -- for evaluating the timing of
7 transport of the contaminants.

8 Q. Okay. FOC is part of calculating
9 the retardation factor; right?

10 A. It's part of --

11 Q. Okay.

12 A. -- of that calculation.

13 Q. All right. But just before we talk
14 about FOC, I just want to know.

15 Is there any other site-specific
16 data that you claim ATSDR -- that was available to
17 ATSDR but ATSDR did not consider in the modeling?

18 Is there anything else other than
19 the FOC data?

20 A. Well, you know, the bulk density is
21 not representative of the site. So that's another
22 one. And -- and --

23 Q. I'm sorry. Was there -- wait.
24 Wait.

1 Was there bulk density data or are
2 you talking about a factor?

3 I'm talking about site-specific
4 data.

5 MS. O'LEARY: Object to form.

6 THE WITNESS: Yeah. No, that
7 will not be site-specific data.

8 BY MS. BAUGHMAN:

9 Q. Okay.

10 A. It's just errors that I did.

11 Q. Okay. So I'm not talking about
12 errors here. So let me try to rephrase it and see
13 if we're on the same page.

14 I'm talking about site-specific data
15 that you claim existed but ATSDR didn't use for
16 the modeling.

17 You've identified the FOC data.

18 Is there any other site-specific
19 data that you claim ATSDR did not use?

20 A. That as far as geochemistry is
21 concerned, that's the one, that's the one I
22 flagged, and I don't have another one.

23 Q. You don't. Okay.

24 So I want to talk about the FOC

1 data.

2 You -- if we look at page 5-17 of
3 your report, you list the site-specific FOC data
4 there; correct?

5 A. Let me see. 5-17? Yes.

6 Q. Okay. First question I have for you
7 is: These data vary very widely, right, by a
8 factor of at least 3 orders of magnitude?

9 A. This type of data does that, yes.

10 Q. Okay. So 3 orders of magnitude
11 means like by a factor of at least a thousand?

12 A. Yeah, in some areas, you have more
13 fraction organic carbon than some other areas,
14 yes.

15 Q. Okay.

16 MS. O'LEARY: I'm sorry.

17 Object to foundation on the last
18 question.

19 BY MS. BAUGHMAN:

20 Q. Which of the data that are listed on
21 your Exhibit 3-2 on page 5-17 of your report,
22 which of those samples are from Tarawa Terrace as
23 opposed to Hadnot Point?

24 A. Well, all of the samples I believe

1 are in the Hadnot Point area, but as far as the
2 hydrogeology are concerned, we are talking about
3 the same type of materials beneath both. You
4 don't have a stop just because you are changing
5 addresses.

6 Q. Okay. Just to be clear, all of the
7 FOC data that existed that you say ATSDR should
8 have used, all of them is from Hadnot Point. None
9 of it is from Tarawa Terrace; right?

10 MS. O'LEARY: Object to form.

11 Asked and answered.

12 THE WITNESS: I believe so
13 because that's -- that's why it was
14 measured, and it is measured in the
15 materials for which groundwater moves.

16 BY MS. BAUGHMAN:

17 Q. Do you have any --

18 A. For both -- for both Tarawa Terrace
19 and Hadnot Point areas.

20 Q. Okay. Do you have any FOC data from
21 Tarawa Terrace such that you can say that the
22 numbers are the same in Tarawa Terrace and Hadnot
23 Point?

24 A. Its geological materials are the

1 same. Therefore, there is we have the data we
2 have and it will be in the same range. As a
3 geologist, I can tell you that.

4 Q. Do you agree that fraction organic
5 carbon should not be used to estimate Kd if the
6 organic carbon content is less than .001?

7 A. Well, this is kind of -- it is when
8 the relationship starts to -- to not be that good
9 anymore. But it is in every -- in every type of
10 groundwater like this, you will have a wide range,
11 and typically what is being done is because the
12 groundwater is encountering all those materials,
13 you typically take median value or geometric mean
14 value or average value to represent those
15 materials. And in some sense, that's what --
16 that's what, you know, even ATSDR had to do.

17 Q. You're aware that the EPA and that
18 other authors have published that you should not
19 use fraction organic carbon to estimate Kd if the
20 organic carbon content is less than .001; right?

21 MS. O'LEARY: Object to
22 foundation.

23 THE WITNESS: It is -- it is
24 not stated exactly like that.

1 It is when the relationship
2 falls, starts not to be a linear
3 relationship in some sense, and it is
4 recommended that, you know, if you -- if
5 you start to go really low like that,
6 it's -- it's not -- it becomes highly
7 uncertain.

8 BY MS. BAUGHMAN:

9 Q. Okay. So, and going back to your
10 Opinion 11, you say at the top of page 5-38 that:

11 "ATSDR's use of a low Kd value had
12 the effect of accelerating arrival of contaminants
13 at the supply wells."

14 Okay. So my question is: Have you
15 conducted a sensitivity analysis for your opinion
16 that the retardation factor used by ATSDR had the
17 effect of accelerating the arrival time?

18 MS. O'LEARY: Object to form
19 and foundation.

20 THE WITNESS: Well,
21 essentially what we are doing is the
22 Tarawa Terrace model because they didn't
23 make the same mistakes or assumptions and
24 incorrect assumptions in the -- in the

1 Hadnot Point one. They were more
2 reasonable there.

3 BY MS. BAUGHMAN:

4 Q. Okay. I'm just asking: Did you
5 conduct a sensitivity analysis to see what the
6 effect would be about using a different
7 retardation factor?

8 A. Well --

9 MS. O'LEARY: Object to form
10 and foundation.

11 THE WITNESS: The sensitivity
12 analysis is that if you -- if you have
13 higher values for the retardation factor,
14 it will go slower, and if you have lower
15 values for the retardation factor, it
16 will go faster.

17 BY MS. BAUGHMAN:

18 Q. I'll object as nonresponsive.
19 Did you run the model with different
20 retardation factors to see what the effect would
21 be?

22 A. I did -- I didn't -- I did a
23 calculation that I present in my report, which are
24 basically the simplest type of calculations that

1 follow the -- the laws of hydrogeology, if you
2 wish, to estimate transport. And this is the
3 results are basically reasonable and that gives
4 you a ballpark.

5 Q. Okay.

6 A. I mean, I'm not saying that it
7 is -- that it is the totals or anything else.
8 It's something that tells you this is the way it
9 looks like.

10 Q. Objection.

11 A. And then -- and then you can go into
12 complexity to hide the fact that you don't have
13 information, but what you should never do is
14 ignore the site-specific data. That's basically
15 my point.

16 Q. Objection. Nonresponsive.

17 Okay. I'm at --

18 THE VIDEOGRAPHER: Time.

19 MS. BAUGHMAN: Yeah. Thank
20 you. I know.

21 BY MS. BAUGHMAN:

22 Q. Did you go to the ATSDR model, not
23 your calculations but the ATSDR model, change the
24 retardation factor using the different FOC numbers

1 for Tarawa Terrace to see what effect that would
2 have? Did you do that?

3 A. I believe Dr. Spiliotopoulos did
4 that.

5 Q. Okay.

6 A. I don't. I didn't do that on the
7 model. I just --

8 Q. All right.

9 A. -- I looked at -- looked at the
10 calculation based on the evaluation, the data, and
11 the parameters that are reasonable to make my
12 estimate presented in my report.

13 Q. Let's talk about that. Let's go
14 to -- I want to talk about your travel time
15 calculation for Tarawa Terrace on page 5-15 and
16 5-16 of your report.

17 And you calculated travel times for
18 PCE to reach TT-26 --

19 A. Hold on. Hold on.

20 Q. You're going to know this without
21 looking.

22 You calculated travel times for PCE
23 to reach Tarawa Terrace 26 from ABC One-Hour
24 Cleaners from three representative flow paths;

1 right?

2 MS. O'LEARY: Object to form.

3 THE WITNESS: Yes.

4 BY MS. BAUGHMAN:

5 Q. Okay. Did you select a flow path
6 that was meant to be representative of a path line
7 that leads to the first detection or first arrival
8 of PCE at TT-26?

9 MS. O'LEARY: Object to form.

10 THE WITNESS: I just looked
11 at the representative pathways for the
12 situation with all of the simplification
13 and uncertainty that are included in --
14 in this. I used the ATSDR hydrological
15 environment, which is oversimplified to
16 start off with.

17 So all of this -- all of this
18 tells you that if you do it in a simple
19 manner, which it should be done first,
20 you just get the range and that is the
21 range.

22 The fastest pathways that I
23 made a calculation for is if the
24 contamination travels in layer 1 for most

1 of the distance to the well.

2 Remember that the well opening
3 is in layer 3. So which ever way you go,
4 at some point you have to go down there.
5 And the pathways that I have are
6 representative. It's a ballpark.

7 BY MS. BAUGHMAN:

8 Q. Okay. I'm going to object as
9 nonresponsive.

10 Would you agree that your analysis
11 regarding Tarawa Terrace and the travel time is
12 not meant to determine when PCE would first arrive
13 at TT-26? You did not do that calculation, did
14 you?

15 MS. O'LEARY: Object to form.

16 THE WITNESS: No. The
17 calculation is when -- when basically the
18 contamination arrives, and you can have a
19 molecule that arrive faster than I
20 calculated and -- but what I am looking
21 at is when does a substantial amount of
22 contamination would have arrived at the
23 well making a simple, a simple set of
24 calculations that can be reproduced that

1 do not have errors or incorrect statement
2 in, and that's what I did and that gives
3 you a ballpark.

4 BY MS. BAUGHMAN:

5 Q. Okay. Have you reached an opinion
6 or have you reached a conclusion within reasonable
7 scientific certainty as to when TT-26 was first
8 contaminated with PCE?

9 MS. O'LEARY: Object to form.

10 THE WITNESS: I did what I
11 did, and it's expressed in my report.

12 BY MS. BAUGHMAN:

13 Q. You're aware that there is -- there
14 are textbooks and peer-reviewed literature about
15 how to calculate the breakthrough when
16 contamination first arrives at a well; right?
17 You're familiar with that?

18 A. Yes.

19 MS. O'LEARY: Object to
20 foundation.

21 BY MS. BAUGHMAN:

22 Q. That's not what you did?

23 MS. O'LEARY: Sorry. Please
24 slow down. Object to foundation.

1 BY MS. BAUGHMAN:

2 Q. You did not do a breakthrough
3 analysis, did you?

4 MS. O'LEARY: Object to form
5 and foundation.

6 THE WITNESS: I did a travel
7 time analysis along three representative
8 pathways. That's what I did.

9 BY MS. BAUGHMAN:

10 Q. You did not do a breakthrough
11 analysis to determine when contamination would
12 first occur at TT-26; correct?

13 MS. O'LEARY: Object to form
14 and foundation.

15 THE WITNESS: As I said
16 before, you can have a molecule arriving
17 faster, but it is not what I did.

18 I said the typical travel time
19 with all the uncertainty you have, and I
20 recognize that, is basically the ballpark
21 is as I estimated it in my report. And
22 you have aspects of it that some of it
23 can go faster, but you also have some of
24 it can go slower.

1 BY MS. BAUGHMAN:

2 Q. Right. But --

3 A. And you have that.

4 Q. -- you agree with me. You
5 understand the concept of breakthrough?

6 A. Yeah.

7 Q. Right.

8 And you agree with me that that's
9 documented in textbooks that you would consider to
10 be reliable on groundwater flow and transport;
11 right?

12 MS. O'LEARY: Object to
13 foundation.

14 THE WITNESS: Yes, you do.

15 BY MS. BAUGHMAN:

16 Q. There's -- there's a methodology to
17 use to determine the breakthrough of a contaminant
18 at a well; correct?

19 MS. O'LEARY: Object to
20 foundation.

21 THE WITNESS: Yes, but we are
22 talking about something different here.

23 I'm saying when -- when would
24 you have expected contamination, you

1 know, substantial contamination to arrive
2 at the well.

3 BY MS. BAUGHMAN:

4 Q. Okay.

5 A. I am not talking about a molecule.

6 Q. You didn't do the breakthrough
7 analysis; right?

8 A. I -- I --

9 MS. O'LEARY: Object to form
10 and foundation.

11 THE WITNESS: Sorry.

12 I did not do a breakthrough
13 analysis.

14 BY MS. BAUGHMAN:

15 Q. Okay. And what do you define as
16 substantial contamination at TT-26? What does
17 that mean?

18 A. It's when --

19 MS. O'LEARY: Object to
20 foundation.

21 THE WITNESS: Yeah.

22 It is when going from some of
23 the pathways, the contamination is
24 expected to arrive basically in a

1 substantial manner.

2 BY MS. BAUGHMAN:

3 Q. Is there a number for substantial
4 like -- like a certain microgram per liter that
5 defines substantial contamination for you?

6 A. I did not try to evaluate
7 concentrations. I evaluate time because I think
8 that's more important.

9 Q. Okay. But you said you were
10 calculating the time for substantial
11 contamination.

12 What do you define as substantial
13 contamination?

14 A. Something that --

15 MS. O'LEARY: Object to
16 foundation.

17 THE WITNESS: Sorry.

18 Something that would be
19 measurable at the time, and I don't have
20 a number. I did not do a breakthrough
21 concentration arrival at the well.

22 I just made how much time
23 would it take for the concentration of
24 the PCE on average along those three

1 different type of pathways to arrive at
2 the well and that's what -- that's the
3 simple things that I did. And this is a
4 reasonable first step that should always
5 be done to give you a ballpark of what is
6 reasonable. And --

7 MS. BAUGHMAN: I'm going to
8 object to the nonresponsive portion, and
9 I will pass the witness.

10 MS. O'LEARY: Okay. If we can
11 just take a few minutes break. Thank
12 you.

13 MS. BAUGHMAN: I assume you
14 won't be talking to your witness during
15 the break?

16 MS. O'LEARY: I might be
17 asking him about certain things, but
18 that's appropriate.

19 MS. BAUGHMAN: That's not
20 appropriate.

21 MS. O'LEARY: We can fight
22 about that later.

23 THE VIDEOGRAPHER: Time is
24 1:50 PM. We are now off the record.

1 (A recess was taken.)

2 THE VIDEOGRAPHER: The time is
3 1:57 PM. We are now on the record.

4 MS. O'LEARY: Thank you.

5 EXAMINATION

6 BY MS. O'LEARY:

7 Q. And, Dr. Hennet, I have just a very
8 few questions.

9 Near the end of Ms. Baughman's
10 questions, she had several for you about the flow
11 paths you used to calculate travel time of PCE to
12 well TT-26.

13 Do you recall that?

14 And I have some -- I want to ask you
15 about a few things in your report related to that.

16 So if you could go to your report,
17 which is Exhibit 31, on page 5-15.

18 A. Yes.

19 Q. All right. In the last paragraph,
20 the second sentence it says:

21 "The representative flow paths
22 considered to represent PCE transport in
23 groundwater are illustrated in Exhibit 3-1. The
24 site-specific data for FOC is summarized in

1 Exhibit 3-2. Supporting materials for the
2 calculated travel times are provided in Attachment
3 D."

4 Did I read that correctly?

5 A. Yes.

6 Q. And so if I -- if you could turn to
7 Attachment D from your report to page D-7 and to
8 D-8.

9 A. Yes.

10 Q. Are you there?

11 Are the graphs shown on D-7 and D-8
12 part of the supporting materials to your opinion
13 on the arrival time of PCE at TT-26?

14 MS. BAUGHMAN: Objection.

15 Leading. Form.

16 THE WITNESS: Yes, this
17 is -- this is basically what I relied
18 upon to -- to support my calculation.

19 BY MS. O'LEARY:

20 Q. And how do these, the figures shown
21 on D-7 and D-8, relate to your representative flow
22 paths?

23 A. This is -- what this provides you is
24 basically on the different layers the gradient of

1 groundwater flow.

2 Q. Oh. Are you looking at D-5 and D-6
3 or D-7 and D-8?

4 A. Well, okay. That is on both what I
5 just said.

6 But can you repeat the question?
7 Because I think I missed the first question you
8 asked.

9 Q. Yeah. So the figures shown -- well,
10 let's back up.

11 The figures shown on D-7 and D-8
12 that are labeled Figure F21 and Figure F25, F20
13 and F24, do you see those figure labels?

14 A. Yes.

15 Q. Where does -- like where do these
16 figures come from?

17 A. They come from the ATSDR work.

18 Q. Okay. And there's what looks to me
19 like a plume shown on these figures; is that
20 correct?

21 A. Yes.

22 Q. Okay. And why did you include
23 figures showing the plume in Attachment D?

24 A. That's to show where ATSDR estimated

1 the concentration was in the groundwater
2 environment in the -- in the different layers. I
3 mean, in layer 1, 4-47 and in layer 3, 48.

4 Q. And why did you include these
5 figures showing ATSDR's prediction of the plume in
6 your report?

7 A. Well, it's -- it's because ATSDR
8 calculation and estimate shows that the
9 concentration or the contaminant, the contaminant,
10 the COCs are basically traveling into those layers
11 and they depicted the results here as plumes.

12 Q. Okay.

13 A. And that -- that shows you that you
14 have transport in layer 1 and you have transport
15 in layer 3.

16 MS. O'LEARY: Okay. I don't
17 have any other questions. Thank you.

18 MS. BAUGHMAN: Great. Hold on
19 one second. Let me just double-check.

20 Yeah, we're done.

21 THE VIDEOGRAPHER: This
22 concludes for today's deposition. The
23 date is June 4, 2025. The time is 2:02
24 PM. We are now off the record.

(Signature not waived, the
deposition concluded at 2:02 PM.)

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DECLARATION UNDER PENALTY OF PERJURY

I declare under penalty of perjury that I have read the entire transcript of my Deposition taken in the captioned matter or the same has been read to me, and the same is true and accurate, save and except for changes and/or corrections, if any, as indicated by me on the DEPOSITION ERRATA SHEET hereof, with the understanding that I offer these changes as if still under oath.

Signed on the _____ day of _____, 2025.

REMY J.-C. HENNET, PhD

CERTIFICATE OF REPORTER

DISTRICT OF COLUMBIA)

I, Denise Dobner Vickery, a
Registered Court Reporter and Notary Public of
the District of Columbia, do hereby certify that
the witness was first duly sworn by me.

I do further certify that the
foregoing is a verbatim transcript of the
testimony as taken stenographically by me at the
time, place and on the date herein set forth, to
the best of my ability.

I do further certify that I am
neither a relative nor employee nor counsel of
any of the parties to this action, and that I am
neither a relative nor employee of such counsel,
and that I am not financially interested in the
outcome of this action.



DENISE DOBNER VICKERY, CRR, RMR
Notary Public in and for the
District of Columbia

My Commission expires: March 14, 2028

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS

COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted

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